aiwa

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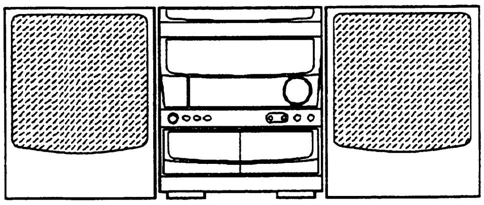
SERVICE

NSX-AV70

SERVICE MANUAL



COMPACT DISC STEREO
CASSETTE RECEIVER

- BASIC TAPE MECHANISM : 2ZM-3MK2 PR5N
- BASIC CD MECHANISM : 4ZG-1 ZDNM
- TYPE: EZ,K,G

CD-CASSEIVER	SPEAKER	REMOTE CONTROLLER
CX-NAV70 (TYPE: K,G,EZ)	SX-NAV70 SX-CR421 SX-CR423	RC UNIT,6AS02

- If requiring information about the CD mechanism, see Service Manual of 4ZG-1, S/M Code No.09-963-128-10T

S/M Code No. 09-966-144-8FE

SPECIFICATIONS

<FM tuner section>

Tuning range	87.5 MHz to 108 MHz
Usable sensitivity(IHF)	13.2 dBf
Antenna	75 ohms (unbalanced)

<AM (MW) tuner section>

Tuning range	531 kHz to 1602 kHz (9 kHz step) 530 kHz to 1710 kHz (10 kHz step)
Usable sensitivity	350 µV/m
Antenna	Loop antenna

<LW tuner section>

Tuning range	144kHz ~ 290kHz
Usable sensitivity	1400 µV/m
Antenna	Loop antenna

<Amplifier section>

Power output	**Front :** Rated : 30 W + 30 W (6 ohms, T.H.D. 1%, 1 kHz/ DIN 45500) Reference: 40 W + 40 W (6 ohms, T.H.D. 10%, 1 kHz/ DIN 45324) **Surround (Rear) :** Rated : 10 W + 10 W (16 ohms, T.H.D. 1%, 1 kHz/ DIN 45500) Reference: 13 W + 13 W (16 ohms, T.H.D. 10%, 1 kHz/ DIN 45324) **Center :** Rated : 20 W (8 ohms, T.H.D. 1%, 1 kHz/ DIN 45500) Reference: 26 W (8 ohms, T.H.D. 10%, 1 kHz/ DIN 45324)
Total Harmonic distortion	0.05% (15 W, 1 kHz, 6 ohms, DIN AUDIO/Front)
Inputs	VIDEO/AUX: 150mV MIC 1, MIC 2: 1 mV (10 kohms)
Outputs	SUPER WOOFER: 1.2 V SPEAKERS: accept speakers of 6 ohms or more SURROUND SPEAKERS: accept speakers of 16 ohms or more CENTER SPEAKER: accept speakers of 8 ohms or more PHONES (stereo jack): accepts headphones of 32 ohms or more

<Cassette deck section>

Track format	4 tracks, 2 channels stereo
Frequency response	CrO_2 tape: 50 Hz – 16000 Hz Normal tape: 50 Hz –15000 Hz
Signal-to-noise ratio	60 dB (DOLBY NR ON, CrO_2 tape peak level)
Recording system	AC bias
Heads	Deck 1: Playback head x 1 Deck 2: Recording/playback/ erase head x 1

<Compact disc player section>

Laser	Semiconductor laser (λ =780 nm)
D-A converter	1 bit dual
Signal-to-noise ratio	85 dB (1 kHz, 0 dB)
Harmonic distortion	0.05% (1 kHz, 0 dB)
Wow and flutter	Unmeasurable

<Speaker system SX-NAV70>

Cabinet type	3way, bass reflex (Magnetic sealed type)
Speakers	Woofer: 140 mm ($5^{5}/_{8}$ in.) cone type Tweeter: 60mm ($3^{1}/_{4}$ in.) cone type Super tweeter: 20 mm ($^{13}/_{16}$ in.) ceramic type
Impedance	6 ohms
Output sound pressure level	87 dB/W/m
Dimensions (W x H x D)	235 x 302 x 250 mm ($9^{3}/_{8}$ x 12 x $10^{7}/_{8}$ in.)
Weight	3.3 kg

<General>

Power requirements	K,EZ : 230 V AC, 50 Hz G : 230-240 V AC, 50 Hz
Power consumption	295 W
Dimensions of main unit (W x H x D)	260 x 307 x 328 mm ($10^{1}/_{4}$ x $12^{1}/_{8}$ x 13 in.)
Weight of main unit	7.4 kg

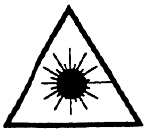
- Design and specifications are subject to change without notice.

- Manufactured under license from Dolby Laboratories Licensing Corporation.
  "DOLBY", the double-D symbol ᗡD and "PRO LOGIC" are trademarks of Dolby Laboratories Licensing Corporation.

PROTECTION OF EYES FROM LASER BEAM DURING SERVICING

This set employs laser. Therefore, be sure to follow carefully the instructions below when servicing.

WARNING!!
WHEN SERVICING, DO NOT APPROACH THE LASER EXIT WITH THE EYE TOO CLOSELY. IN CASE IT IS NECESSARY TO CONFIRM LASER BEAM EMISSION. BE SURE TO OBSERVE FROM A DISTANCE OF MORE THAN 30cm FROM THE SURFACE OF THE OBJECTIVE LENS ON THE OPTICAL PICK-UP BLOCK.



- ■ Caution: Invisible laser radiation when open and interlocks defeated avoid exposure to beam.
- ■ Advarsel: Usynlig laserståling ved åbning, når sikkerhedsafbrydere er ude af funktion. Undgå udsættelse for stråling.

VAROITUS!
Laiteen Käyttäminen muulla kuin tässä käyttöohjeessa mainitulla tavalla saattaa altistaa käyt-täjän turvallisuusluokan 1 ylittävälle näkymättömälle lasersäteilylle.

VARNING!
Om apparaten används på annat sätt än vad som specificeras i denna bruksanvising, kan användaren utsättas för osynling laserstrålning, som överskrider gränsen för laserklass 1.

CAUTION
Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

ATTENTION
L'utilisation de commandes, réglages ou procédures autres que ceux spécifiés peut entraîner une dangereuse exposition aux radiations.

ADVARSEL!
Usynlig laserståling ved åbning, når sikkerhedsafbrydereer ude af funktion. Undgå udsættelse for stråling.

This Compact Disc player is classified as a CLASS 1 LASER product.
The CLASS 1 LASER PRODUCT label is located on the rear exterior.

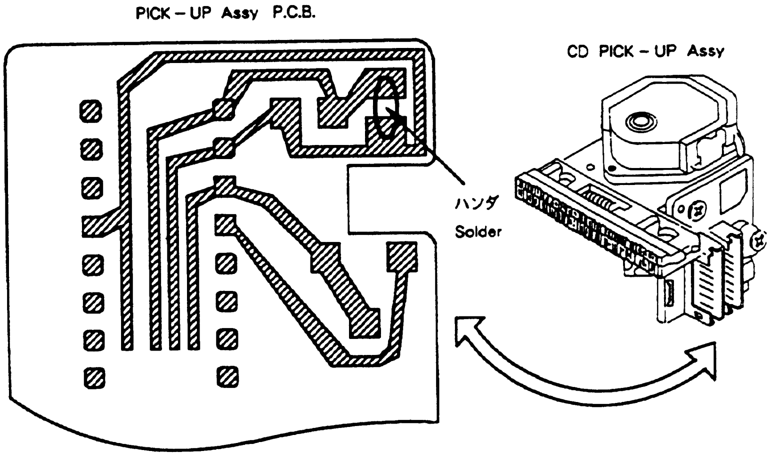
CLASS 1	LASER PRODUCT
KLASSE 1	LASER PRODUKT
LUOKAN 1	LASER LAITE
KLASS 1	LASER APPARAT

Precaution to replace Optical block

(KSS - 210A)

Body or clothes electrostatic potential could ruin laser diode in the optical block. Be sure ground body and workbench, and use care the clothes do not touch the diode.

1) After the connection, remove solder shown in figure below.



ELECTRICAL MAIN PARTS LIST

If can't understand for Description please kindly refer to " REFERENCE NAME LIST ".

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
IC			
	86-NFT-650-010		C-IC UPD78045BGF-017
	87-A20-101-019		IC,STK405-070A
	87-070-453-010		IC,SPS-442-1
	87-070-121-010		IC,HA12185NT
	87-017-914-019		IC,BU4094 BC
	87-017-804-019		IC,BU4052BC
	87-A20-107-019		IC,BA3836
	87-017-888-089		IC,NJM4558MD
	87-A20-069-049		C-IC,BA3842F
	87-070-127-119		IC,LC72131D
	87-017-714-119		IC,LA1836L
	87-070-267-019		IC,STK405-050
	87-001-874-019		IC-HA12134A
	87-A20-082-010		C-IC,NJW1102AFG1
	87-017-915-089		IC,BU4094BCF
	87-A20-067-040		C-IC,M65849FP
TRANSISTOR			
	87-026-610-089		TR,KTC3198GR
	89-327-125-089		C-TR,2SC2712GR
	89-111-625-089		C-TR,2SA1162GR
	87-026-609-089		TR,KTA1266GR
	89-213-702-019		TR 2SB1370E
	89-332-665-089		TR,2SC3266GR
	89-406-555-089		TR,2SD655E
	87-026-218-089		TR,DTC144ES
	87-026-286-089		TR,DTA143ES
	89-502-466-089		TR FET 2SK246-BL (TPE2)
	89-333-317-089		TR,2SC3331T
	87-026-216-089		TR,DTA124ES
	89-109-521-089		TR,2SA952K
	89-112-965-089		TR,2SA1296GR
	87-026-219-089		TR,DTA144ES
	89-327-143-089		C-TR,2SC2714 (O)
	89-328-785-089		TR 2SC2878-A (E2-M)
	87-026-269-089		TR,DTA114ES
	89-503-602-089		C-FET,2SK360E
	87-026-214-089		TR,DTA114YS
	89-505-434-549		C-FET,2SK543(4/5)
	87-026-462-089		TR,2SC1740SRS
	89-320-011-089		TR,2SC2001K
	89-110-155-089		TR,2SA1015GR
DIODE			
	87-020-027-089		C-DIODE,1SS184
	87-020-125-089		C-DIODE,1SS181
	87-017-078-089		DIODE,1N4003
	87-017-437-089		DIODE,1N4148M
	87-A40-116-069		DIODE,RS403L-B-D-51
	87-001-559-089		DIODE,ISS131(T-72)
	87-020-339-089		C-DIODE,1SS226
	87-A40-199-089		ZENER,UZL6H2
	87-A40-201-089		ZENER,UZ4.7BSA
	87-A40-203-089		ZENER,UZ5.1BSC
	87-A40-209-089		ZENER,UZ27BSD
	87-A40-200-089		ZENER,UZL11L3
	87-A40-202-089		ZENER,UZ5.1BSB
	87-A40-198-089		ZENER,UZL6M1
MAIN C.B			
BPF831	87-030-105-019		FLTR,BPMB6A
C131	87-010-403-089		CAP,E 3.3-50 SME
C141	87-010-384-089		CAP,E 100-25 SME
C142	87-010-384-089		CAP,E 100-25 SME
C143	87-010-764-089		CAP,E 47-63V
C144	87-010-196-089		C-CAP,S 0.1-25 F
C145	87-010-196-089		C-CAP,S 0.1-25 F
C146	87-010-390-019		CAP,E 3300-25 SME
C151	87-012-368-089		C-CAP,S 0.1-50F
C152	87-012-368-089		C-CAP,S 0.1-50F
C153	87-016-474-099		CAP,E 3300-50
C154	87-016-474-099		CAP,E 3300-50
C161	87-010-401-089		CAP,E 1-50 SME
C172	87-012-140-089		C-CAP,S 470P-50 CH
C173	87-010-405-089		CAP,E 10-50 SME
C181	87-010-101-089		CAP,E 220-16 SME
C182	87-010-381-089		CAP,E 330-16 SME
C197	87-010-196-089		C-CAP,S 0.1-25 F
C198	87-010-196-089		C-CAP,S 0.1-25 F
C201	87-010-404-089		CAP,E 4.7-50 SME
C202	87-010-404-089		CAP,E 4.7-50 SME
C203	87-010-177-089		C-CAP,S 820P-50 SL
C204	87-010-177-089		C-CAP,S 820P-50 SL
C205	87-010-182-089		C-CAP,S 2200P-50 B
C206	87-010-182-089		C-CAP,S 2200P-50 B
C207	87-010-402-089		CAP,E 2.2-50 SME
C208	87-010-402-089		CAP,E 2.2-50 SME
C209	87-010-404-089		CAP,E 4.7-50 SME
C210	87-010-404-089		CAP,E 4.7-50 SME
C211	87-010-318-089		C-CAP,S 47P-50 CH
C212	87-010-318-089		C-CAP,S 47P-50 CH
C213	87-010-147-089		C-CAP,S 3P-50 CH
C214	87-010-147-089		C-CAP,S 3P-50 CH
C215	87-010-196-089		C-CAP,S 0.1-25 F
C216	87-010-196-089		C-CAP,S 0.1-25 F
C217	87-010-196-089		C-CAP,S 0.1-25 F
C218	87-010-196-089		C-CAP,S 0.1-25 F
C219	87-010-198-089		C-CAP,S 0.022-25 B
C220	87-010-198-089		C-CAP,S 0.022-25 B
C221	87-010-194-089		C-CAP,S 0.047-25 F
C261	87-010-197-089		C-CAP,S 0.01-25 B
C262	87-010-197-089		C-CAP,S 0.01-25 B
C263	87-010-197-089		C-CAP,S 0.01-25 B
C264	87-010-197-089		C-CAP,S 0.01-25 B
C301	87-010-197-089		C-CAP,S 0.01-25 B
C311	87-012-155-089		C-CAP,S 180P-50 CH
C312	87-012-155-089		C-CAP,S 180P-50 CH
C313	87-010-181-089		C-CAP,S 1800P-50 B
C314	87-010-181-089		C-CAP,S 18500P-50 B
C321	87-012-145-089		C-CAP S 270P-50CH
C322	87-012-145-089		C-CAP S 270P-50CH
C323	87-012-154-089		C-CAP,S 150P-50 CH
C324	87-012-154-089		C-CAP,S 150P-50 CH
C325	87-010-179-089		C-CAP,S 1200P-50 B
C326	87-010-179-089		C-CAP,S 1200P-50 B
C333	87-010-198-089		C-CAP,S 0.022-25 B
C334	87-010-198-089		C-CAP,S 0.022-25 B
C337	87-010-400-089		CAP,E 0.47-50 SME
C338	87-010-400-089		CAP,E 0.47-50 SME
C339	87-010-371-089		CAP,E 470-6.3 11L
C340	87-010-196-089		C-CAP,S 0.1-25 F
C355	87-010-401-089		CAP,E 1-50 SME
C356	87-010-401-089		CAP,E 1-50 SME
C357	87-010-178-089		C-CAP,S 1000P-50 B
C359	87-010-196-089		C-CAP,S 0.1-25 F
C360	87-010-196-089		C-CAP,S 0.1-25 F
C371	87-012-156-089		C-CAP,S 220P-50 CH
C372	87-012-156-089		C-CAP,S 220P-50 CH
C373	87-010-177-089		C-CAP,S 820P-50 SL
C374	87-010-175-089		C-CAP,S 560P-50 UJ
C376	87-010-392-089		CAP,E 33-35 SME
C377	87-010-198-089		C-CAP,S 0.022-25 B
C378	87-010-197-089		C-CAP,S 0.01-25 B
C379	87-010-183-089		C-CAP,S 2700P-50 B
C380	87-010-183-089		C-CAP,S 2700P-50 B

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C381	87-010-183-089		C-CAP,S 2700P-50 B
C401	87-012-142-089		C-CAP,S 0.33-16 F
C402	87-012-142-089		C-CAP,S 0.33-16 F
C403	87-010-177-089		C-CAP,S 820P-50 SL
C404	87-010-177-089		C-CAP,S 820P-50 SL
C405	87-010-545-089		CAP,E 0.22-50 SME
C406	87-010-545-089		CAP,E 0.22-50 SME
C407	87-010-400-089		CAP,E 0.47-50 SME
C408	87-010-400-089		CAP,E 0.47-50 SME
C409	87-010-405-089		CAP,E 10-50 SME
C452	87-010-184-089		C-CAP,S 3300P-50 B
C453	87-010-312-089		C-CAP,S 15P-50 CH
C455	87-010-197-089		C-CAP,S 0.01-25 B
C456	87-010-402-089		CAP,E 2.2-50 SME
C521	87-010-181-089		C-CAP,S 1800P-50 B
C522	87-010-181-089		C-CAP,S 1800P-50 B
C523	87-010-178-089		C-CAP,S 1000P-50 B
C524	87-010-178-089		C-CAP,S 1000P-50 B
C527	87-010-220-089		C-CAP,S 0.018-25 B
C528	87-010-220-089		C-CAP,S 0.018-25 B
C529	87-010-400-089		CAP,E 0.47-50 SME
C530	87-010-400-089		CAP,E 0.47-50 SME
C531	87-010-382-089		CAP,E 22-25 SME
C532	87-010-198-089		C-CAP,S 0.022-25 B
C551	87-010-401-089		CAP,E 1-50 SME
C552	87-010-401-089		CAP,E 1-50 SME
C553	87-010-194-089		C-CAP,S 0.047-25 F
C554	87-010-183-089		C-CAP,S 2700P-50 B
C555	87-010-196-089		C-CAP,S 0.1-25 F
C556	87-010-263-089		CAP,E 100-10 SME 5X11
C557	87-010-596-089		C-CAP,S 0.047-16 RK
C558	87-010-545-089		CAP,E 0.22-50 SME
C562	87-010-596-089		C-CAP,S 0.047-16 RK
C601	87-010-198-089		C-CAP,S 0.022-25 B
C701	87-010-404-089		CAP,E 4.7-50 SME
C702	87-010-197-089		C-CAP,S 0.01-25 B
C703	87-010-197-089		C-CAP,S 0.01-25 B
C704	87-010-178-089		C-CAP,S 1000P-50 B
C707	87-010-402-089		CAP,E 2.2-50 SME
C708	87-010-402-089		CAP,E 2.2-50 SME
C711	87-010-263-089		CAP,E 100-10 SME 5X11
C712	87-010-112-089		CAP,E 100-16 11L
C722	87-010-152-089		C-CAP,S 8P-50 CH
C723	87-010-178-089		C-CAP,S 1000P-50 B
C725	87-010-178-089		C-CAP,S 1000P-50 B
C727	87-010-196-089		C-CAP,S 0.1-25 F
C728	87-010-248-089		CAP,E 220-10 SME
C729	87-010-197-089		C-CAP,S 0.01-25 B
C730	87-018-134-089		CAP,TC-U 0.01-16 Y
C770	87-010-197-089		C-CAP,S 0.01-25 B
C771	87-010-405-089		CAP,E 10-50 SME
C772	87-010-194-089		C-CAP,S 0.047-25 F
C773	87-010-196-089		C-CAP,S 0.1-25 F
C774	87-010-263-089		CAP,E 100-10 SME 5X11
C775	87-010-405-089		CAP,E 10-50 SME
C776	87-010-197-089		C-CAP,S 0.01-25 B
C777	87-010-400-089		CAP,E 0.47-50 SME
C778	87-010-401-089		CAP,E 1-50 SME
C779	87-010-401-089		CAP,E 1-50 SME
C780	87-010-197-089		C-CAP,S 0.01-25 B
C781	87-010-404-089		CAP,E 4.7-50 SME
C782	87-010-404-089		CAP,E 4.7-50 SME
C787	87-010-184-089		C-CAP,S 3300P-50 B
C788	87-010-184-089		C-CAP,S 3300P-50 B
C789	87-010-179-089		C-CAP,S 1200-50 B
C790	87-010-179-089		C-CAP,S 1200-50 B
C791	87-010-401-089		CAP,E 1-50 SME
C792	87-010-183-089		C-CAP,S 2700P-50 B
C793	87-010-189-089		C-CAP,S 8200P-50 B
C794	87-010-260-089		CAP,E 47-25 SME

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C795	87-010-194-089		C-CAP,S 0.047-25 F
C796	87-010-403-089		CAP,E 3.3-50 SME
C797	87-010-197-089		C-CAP,S 0.01-25 B
C799	87-010-405-089		CAP,E 10-50 SME
C801	87-010-197-089		C-CAP,S 0.01-25 B
C802	87-010-312-089		C-CAP,S 15P-50 CH
C803	87-018-134-089		CAP,TC-U 0.01-16 Y
C805	87-010-146-089		C-CAP,S 2P-50 CH
C806	87-010-147-089		C-CAP,S 3P-50 CH
C807	87-010-312-089		C-CAP,S 15P-50 CH
C808	87-010-322-089		C-CAP,S 100P-50 CH
C809	87-010-197-089		C-CAP,S 0.01-25 B
C810	87-010-197-089		C-CAP,S 0.01-25 B
C811	87-010-149-089		C-CAP,S 5P-50 CH
C812	87-010-314-089		C-CAP,S 22P-50 CH
C813	87-010-197-089		C-CAP,S 0.01-25 B
C814	87-010-197-089		C-CAP,S 0.01-25 B
C817	87-010-196-089		C-CAP,S 0.1-25 F
C820	87-010-260-089		CAP,E 47-25 SME
C821	87-010-197-089		C-CAP,S 0.01-25 B
C823	87-010-197-089		C-CAP,S 0.01-25 B
C825	87-010-196-089		C-CAP,S 0.1-25 F
C827	87-010-145-089		C-CAP,S 1P-50 CH
C831	87-010-312-089		C-CAP,S 15P-50 CH
C832	87-010-314-089		C-CAP,S 22P-50 CH
C833	87-010-197-089		C-CAP,S 0.01-25 B
C834	87-010-311-089		C-CAP,S 12P-50 CH
C835	87-010-154-089		C-CAP,S 10P-50 CH
C836	87-010-312-089		C-CAP,S 15P-50 CH
C837	87-010-312-089		C-CAP,S 15P-50 CH
C843	87-010-146-089		C-CAP,S 2P-50 CH
C849	87-010-197-089		C-CAP,S 0.01-25 B
C851	87-010-197-089		C-CAP,S 0.01-25 B
C901	87-010-197-089		C-CAP,S 0.01-25 B
C942	87-010-148-089		C-CAP,S 4P-50 CH
C946	87-010-401-089		CAP,E 1-50 SME
C952	87-010-197-089		C-CAP,S 0.01-25 B
C955	87-010-197-089		C-CAP,S 0.01-25 B
C957	87-010-315-089		C-CAP,S 27P-50CH
C958	87-010-197-089		C-CAP,S 0.01-25 B
C960	87-010-196-089		C-CAP,S 0.1-25 F
C988	87-010-198-089		C-CAP,S 0.022-25 B
C999	87-010-196-089		C-CAP,S 0.1-25 F
CF801	87-008-423-089		CF,SFE 10.7 MS3G-A
CF802	82-785-747-089		CF,MS2 GHY,R
D801	87-002-730-089		VARI-CAP SVC203SPA
D802	87-002-730-089		VARI-CAP SVC203SPA
D803	87-002-730-089		VARI-CAP SVC203SPA
D804	87-002-730-089		VARI-CAP SVC203SPA
FT510	83-NF5-632-019		CABLE FFC 6P-1.25
IFT806	87-A50-018-019		COIL,FM IFT(4T)COI
J241	87-A60-031-019		JACK,6.3 BLK ST W/S
J261	87-A60-238-019		TERMINAL,SP 4PMSC
J281	87-099-801-019		JACK,PIN 1P BLK
J501	87-099-715-019		JACK,PIN 2P
J802	87-033-241-019		TERMINAL,ANT AJ-2039
L261	87-003-383-019		COIL,1UH-S
L262	87-003-383-019		COIL,1UH-S
L351	87-A50-149-019		COIL,TRAP 85K
L352	87-A50-149-019		COIL,TRAP 85K
L371	87-007-342-019		COIL,OSC 85K BIAS
L701	87-A50-027-019		COIL,1 POLE MPX (TOK)
L702	87-A50-027-019		COIL,1 POLE MPX (TOK)
L741	87-A50-015-019		COIL,FM DET(TOK)
L742	87-A90-051-019		FLTR,CFAZ-450(TOK)
L770	87-003-102-089		COIL,10UH(CECS)
L790	87-005-564-089		C-COIL,2.2UH
L801	87-006-249-019		COIL,ANT FM3/4TS,L4
L802	87-006-251-019		COIL,ANT FM2-3/4TS,L4
L803	87-006-244-019		COIL,RF FM 3-1/2T,L4

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
L804	87-006-250-019		COIL,RF FM 3-1/2TS,L4
L805	87-003-098-089		COIL,2.2UH(CECS)
L807	87-A50-031-019		COIL,FM OSC (TOK)
L831	87-006-250-019		COIL,RF FM 3-1/2TS,L4
L832	87-003-098-089		COIL,2.2UH(CECS)
L941	87-A50-020-019		COIL,ANT LW
L942	87-A50-019-019		COIL,OSC LW
L981	86-NF4-665-019		AM PACK 1(TOK)
R191	87-022-050-089		RESIS METAL 1W-0.22J
R192	87-022-050-089		RESIS METAL 1W-0.22J
RY151	87-045-361-019		RELAY,DH12D2-OS(M)-2
SFR311	87-024-174-089		SFR 33K DIA.6 V
SFR312	87-024-174-089		SFR 33K DIA.6 V
SFR321	87-024-174-089		SFR 33K DIA.6 V
SFR322	87-024-174-089		SFR 33K DIA.6 V
SFR371	87-024-175-089		SFR,47K DIA6 V
SFR372	87-024-175-089		SFR,47K DIA6 V
SFR401	87-024-175-089		SFR,47K DIA6 V
SFR402	87-024-175-089		SFR,47K DIA6 V
SFR722	87-024-353-089		SFR,10K DIA6 H
TC721	87-011-253-089		TRIMER,30P LAR
TC801	87-011-252-089		TRIMMER 10P LAR
TC802	87-011-252-089		TRIMMER 10P LAR
TC803	87-011-252-089		TRIMMER 10P LAR
TC942	87-011-253-089		TRIMER,30P LAR
VR501	82-NF5-660-019		VR,50KBX2 RK14K12A
W111	85-NF5-628-019		F-CABLE 7P-2.5
X703	84-508-618-019		VIB,CER CSB 456 F/5
X721	87-030-372-019		VIB,XTAL 7.2MHZ

FRONT C.B

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C201	87-010-196-089		C-CAP,S 0.1-25 F
C203	87-012-155-089		C-CAP,S 180P-50 CH
C204	87-010-313-089		C-CAP,S 18P-50 CH
C205	87-010-314-089		C-CAP,S 22P-50 CH
C206	87-012-140-089		C-CAP,S 470P-50 CH
C207	87-018-209-089		CAP,TC-U 0.1-50 F
C251	87-010-405-049		CAP,E 10-50 SME
C252	87-010-263-049		CAP,E 100-10
C253	87-010-248-049		CAP,E 220-10 SME
C255	87-010-494-049		CAP,E 1-50 GAS
C256	87-010-494-049		CAP,E 1-50 GAS
C351	87-010-490-049		CAP,ELECT 0.1-50
C352	87-010-490-049		CAP,ELECT 0.1-50
C353	87-010-408-049		CAP,E 47-50 SME
C401	87-010-198-089		C-CAP,S 0.022-25 B
C508	87-010-112-049		CAP,E 100-16
C601	87-010-405-049		CAP,E 10-50 SME
C602	87-010-248-049		CAP,E 220-10 SME
C603	87-010-196-089		C-CAP,S 0.1-25 F
C604	87-010-186-089		C-CAP,S 4700P-50 B
C605	87-010-545-049		CAP,E 0.22-50 SME
C606	87-010-321-089		C-CAP,S 82P-50 CH
C607	87-010-196-089		C-CAP,S 0.1-25 F
C608	87-010-196-089		C-CAP,S 0.1-25 F
C609	87-010-177-089		C-CAP,S 820P-50 SL
C651	87-010-494-049		CAP,E 1-50 GAS
C652	87-010-196-089		C-CAP,S 0.1-25 F
C653	87-010-491-049		CAP,E 0.22-50 GAS
C654	87-010-196-089		C-CAP,S 0.1-25 F
C715	87-010-553-049		CAP,E 47-16 GAS
C851	87-010-196-089		C-CAP,S 0.1-25 F
C853	87-010-406-049		CAP,E 22-50 SME
C854	87-010-560-049		CAP,E 10-50 GAS
EMI600	87-008-372-089		FLTR,EMI BL 01RN1
FL301	86-NF6-609-019		FL,8-ST-18GK
FT101	85-NF5-615-019		CABLE,FFC 15P-1.25
FT102	88-913-261-119		CABLE FFC,13P-1.25
J601	82-NF7-630-019		JACK,3.5 MO
J602	82-NF7-630-019		JACK,3.5 MO
L201	87-007-340-019		COIL,CLOCK 4.19MHZ
L220	87-003-098-019		COIL,2.2UH
LED401	87-070-201-089		LED,SLP9118C-51-S-T1
LED402	87-070-201-089		LED,SLP9118C-51-S-T1
LED403	87-070-201-089		LED,SLP9118C-51-S-T1
LED404	87-070-201-089		LED,SLP9118C-51-S-T1
LED411	87-070-199-089		LED,SLP738F-81-S-T1
LED412	87-070-199-089		LED,SLP738F-81-S-T1
LED413	87-070-199-089		LED,SLP738F-81-S-T1
LED414	87-070-199-089		LED,SLP738F-81-S-T1
LED415	87-070-199-089		LED,SLP738F-81-S-T1
LED416	87-070-199-089		LED,SLP738F-81-S-T1
LED417	87-070-199-089		LED,SLP738F-81-S-T1
LED418	87-070-199-089		LED,SLP738F-81-S-T1
LED421	87-017-784-080		LED,SEL 1550CM TP8
LED422	87-017-784-080		LED,SEL 1550CM TP8
LED423	87-017-784-080		LED,SEL 1550CM TP8
LED424	87-017-784-080		LED,SEL 1550CM TP8
LED425	87-017-784-080		LED,SEL 1550CM TP8
LED426	87-017-784-080		LED,SEL 1550CM TP8
LED431	87-070-278-019		LED,SLZ-738A-24-S
LED432	87-070-278-019		LED,SLZ-738A-24-S
LED433	87-070-278-019		LED,SLZ-738A-24-S
LED434	87-070-278-019		LED,SLZ-738A-24-S
LED435	87-070-290-019		LED,SLZ 936-30-S
LED436	87-070-290-019		LED,SLZ 936-30-S
LED441	87-017-733-080		LED,SEL1250SM
LED442	87-017-733-080		LED,SEL1250SM
LED443	87-017-733-080		LED,SEL1250SM
LED444	87-017-733-080		LED,SEL1250SM
LED445	87-017-733-080		LED,SEL1250SM
S301	87-036-397-089		SW,TACT SKQNAB
S302	87-036-397-089		SW,TACT SKQNAB
S303	87-036-397-089		SW,TACT SKQNAB
S304	87-036-397-089		SW,TACT SKQNAB
S305	87-036-397-089		SW,TACT SKQNAB
S306	87-036-397-089		SW,TACT SKQNAB
S307	87-036-397-089		SW,TACT SKQNAB
S313	87-036-397-089		SW,TACT SKQNAB
S314	87-036-397-089		SW,TACT SKQNAB
S315	87-036-397-089		SW,TACT SKQNAB
S316	87-036-397-089		SW,TACT SKQNAB
S317	87-036-397-089		SW,TACT SKQNAB
S318	87-036-397-089		SW,TACT SKQNAB
S319	87-036-397-089		SW,TACT SKQNAB
S320	87-036-397-089		SW,TACT SKQNAB
S321	87-036-397-089		SW,TACT SKQNAB
S322	87-036-397-089		SW,TACT SKQNAB
S323	87-036-397-089		SW,TACT SKQNAB
S324	87-036-397-089		SW,TACT SKQNAB
S325	87-036-397-089		SW,TACT SKQNAB
S326	87-036-397-089		SW,TACT SKQNAB
S327	87-036-397-089		SW,TACT SKQNAB
S328	87-036-397-089		SW,TACT SKQNAB
S329	87-036-397-089		SW,TACT SKQNAB
S330	87-036-397-089		SW,TACT SKQNAB
VR601	81-MX4-637-019		VR 10KA RK11K1130
VR801	86-NT1-634-019		VR,100K W-L20

MVR C.B

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C451	87-010-176-089		C-CAP,S 680P-50 SL
C452	87-010-176-089		C-CAP,S 680P-50 SL
C457	87-010-405-049		CAP,E 10-50 SME
C458	87-010-405-049		CAP,E 10-50 SME
C459	87-016-456-049		CAP,E 22-16 LLA
C460	87-010-112-049		CAP,E 100-16
C461	87-016-081-089		C-CAP,S 0.1-16 RK

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C462	87-010-260-049		CAP,E 47-25 SME
C464	87-016-472-049		CAP,E 22-16 SME (K)
C465	87-010-263-049		CAP,E 100-10
C466	87-016-081-089		C-CAP,S 0.1-16 RK
C467	87-010-378-049		CAP,E 10-16
C468	87-010-378-049		CAP,E 10-16
C469	87-010-378-049		CAP,E 10-16
C470	87-010-378-049		CAP,E 10-16
C471	87-010-378-049		CAP,E 10-16
C472	87-010-101-089		CAP,E 220-16 SME
C473	87-012-140-089		C-CAP,S 470P-50 CH
C474	87-010-187-089		C-CAP,S 5600P-50 B
C475	87-010-186-089		C-CAP,S 4700P-50 CH
C478	87-012-394-089		C-CAP,0.68-16,R,K
C479	87-012-393-089		C-CAP,S 0.22-16,R,K
C480	87-012-393-089		C-CAP,S 0.22-16,R,K
C481	87-010-404-049		CAP,E 4.7-50 SME
C482	87-010-404-049		CAP,E 4.7-50 SME
C483	87-012-393-089		C-CAP,S 0.22-16,R,K
C484	87-012-393-089		C-CAP,S 0.22-16,R,K
C485	87-016-081-089		C-CAP,S 0.1-16 RK
C488	87-016-081-089		C-CAP,S 0.1-16 RK
C489	87-016-081-089		C-CAP,S 0.1-16 RK
C492	87-016-081-089		C-CAP,S 0.1-16 RK
C495	87-018-134-089		CAP,TC-U 0.01-16 NYU
C671	87-010-402-049		CAP,E 2.2-50 SME
C672	87-010-402-049		CAP,E 2.2-50 SME
C673	87-010-401-049		CAP,E 1-50 SME
C674	87-010-401-049		CAP,E 1-50 SME
C675	87-010-263-049		CAP,E 100-10
C676	87-010-384-049		CAP,E 100-25 SME
C701	87-010-993-089		C-CAP,S 0.056-25 B
C702	87-010-993-089		C-CAP,S 0.056-25 B
C703	87-016-460-089		C-CAP,S 0.22-16 B
C704	87-016-460-089		C-CAP,S 0.22-16 B
C705	87-016-081-089		C-CAP,S 0.1-16 RK
C706	87-010-260-049		CAP,E 47-25 SME
C707	87-010-182-089		C-CAP,S 2200P-50 B
C708	87-010-182-089		C-CAP,S 2200P-50 B
C709	87-010-545-049		CAP E 0.22-50 SME
C710	87-010-545-049		CAP E 0.22-50 SME
C711	87-010-401-049		CAP,E 1-50 SME
C712	87-010-401-049		CAP,E 1-50 SME
C713	87-010-260-049		CAP,E 47-25 SME
C714	87-010-405-049		CAP,E 10-50 SME
C716	87-018-209-019		CAP,TC-U 0.1-50 F
C717	87-010-401-049		CAP,E 1-50 SME
C718	87-010-401-049		CAP,E 1-50 SME
C773	87-010-198-089		C-CAP,S 0.022-25 B
C871	87-012-358-089		C-CAP,S 0.47-10FZ
C872	87-010-179-089		C-CAP,S 1200P-50 B
C873	87-010-180-089		C-CAP,S 1500P-50 B
C874	87-010-180-089		C-CAP,S 1500P-50 B
C875	87-010-177-089		C-CAP,S 820P-50 SL
C876	87-010-180-089		C-CAP,S 1500P-50 B
C877	87-010-263-049		CAP,E 100-10
C878	87-010-194-089		C-CAP,S 0.047-25 F
C879	87-012-141-089		C-CAP,S 0.22-16 F
C880	87-010-179-089		C-CAP,S 1200P-50 B
C881	87-010-426-089		C-CAP,S 0.012-25 B
C883	87-010-404-049		CAP,E 4.7-50 SME
C884	87-010-263-049		CAP,E 100-10
C885	87-010-196-089		C-CAP,S 0.1-25 F
C886	87-012-156-089		C-CAP,S 220P-50 CH
C887	87-010-319-089		C-CAP,S 56P-50 CH
C888	87-010-319-089		C-CAP,S 56P-50 CH
C889	87-010-196-089		C-CAP,S 0.1-25 F
C890	87-012-358-089		C-CAP,S 0.47-10 F
C891	87-010-197-089		C-CAP,S 0.01-25 B
C892	87-010-179-089		C-CAP,S 1200P-50 B

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C894	87-012-358-089		C-CAP,S 0.47-10FZ
FT103	88-906-201-119		FF-CABLE,6P 1.25
L871	87-005-440-089		COIL,47UH FLR50
MVR771	86-NF6-651-019		VR,MOT 50KBX4EUW
R477	87-025-407-089		RES,M/F 100K-1/8W
KEY C.B			
S308	87-036-397-089		SW,TACT SKQNAB
S309	87-036-397-089		SW,TACT SKQNAB
S310	87-036-397-089		SW,TACT SKQNAB
S311	87-036-397-089		SW,TACT SKQNAB
S312	87-036-397-089		SW,TACT SKQNAB
AMP C.B			
C561	87-010-177-089		C-CAP,S 820P-50 SL
C562	87-010-177-089		C-CAP,S 820P-50 SL
C563	87-010-402-049		CAP E2.2-50 SME
C564	87-010-402-049		CAP E2.2-50 SME
C565	87-010-378-049		CAP,E 10-16
C566	87-010-378-049		CAP,E 10-16
C569	87-010-147-089		C-CAP,S 3P-50 CH
C570	87-010-147-089		C-CAP,S 3P-50 CH
C571	87-012-361-089		C-CAP,S 0.056-25 Y
C572	87-012-361-089		C-CAP,S 0.056-25 Y
C573	87-010-196-089		C-CAP,S 0.1-25 F
C574	87-010-196-089		C-CAP,S 0.1-25 F
C575	87-010-193-089		C-CAP,S 0.033-25 F
C576	87-010-193-089		C-CAP,S 0.033-25 F
C577	87-010-197-089		C-CAP,S 0.01-25 B
C578	87-010-194-089		C-CAP,S 0.047-25 F
C581	87-010-405-049		CAP,E 10-50 SME
C582	87-010-398-099		CAP,E 2200-35V
C583	87-010-398-099		CAP,E 2200-35V
C584	87-012-368-089		C-CAP,S 0.1-50F
C585	87-010-196-089		C-CAP,S 0.1-25 F
J561	87-099-803-019		JACK,PIN 3P OWR
L561	87-003-383-019		COIL,1UH-S
L562	87-003-383-019		COIL,1UH-S
R585	87-022-050-089		RESIS METAL 1W-0.22J
R586	87-022-050-089		RESIS METAL 1W-0.22J
AC C.B			
C103	87-010-197-089		C-CAP,S 0.1-25 B
R111	87-022-184-089		RES,METAL 0.33-1W
R112	87-022-184-089		RES,METAL 0.33-1W
⚠PR101	87-026-690-089		PROTECTOR,5A 125V
⚠PR102	87-026-690-089		PROTECTOR,5A 125V
PT C.B			
⚠	82-304-743-019		TERMINAL,1P
⚠F101	87-035-363-019		FUSE,1.25A 250V T E
⚠FC101	87-033-213-089		CLAMP FUSE SMK
⚠FC102	87-033-213-089		CLAMP FUSE SMK
⚠PT101	86-NFT-635-019		PT,6NF-26 EK
DECK C.B			
SFR1	87-024-581-089		SFR,3.3K DIA 6H
SOL1	82-ZM1-618-310		SOL ASSY,27
SOL2	82-ZM1-626-310		SOL ASSY,27K
SW1	87-036-378-019		SW,PUSH 1-1-1 SH2
SW2	87-036-378-019		SW,PUSH 1-1-1 SH2
SW3	87-036-378-019		SW,PUSH 1-1-1 SH2
SW4	87-036-378-019		SW,PUSH 1-1-1 SH2
SW5	87-036-378-019		SW,PUSH 1-1-1 SH2
SW6	87-036-378-019		SW,PUSH 1-1-1 SH2
SW8	87-036-378-019		SW,PUSH 1-1-1 SH2

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C462	87-010-260-049		CAP,E 47-25 SME
C464	87-016-472-049		CAP,E 22-16 SME (K)
C465	87-010-263-049		CAP,E 100-10
C466	87-016-081-089		C-CAP,S 0.1-16 RK
C467	87-010-378-049		CAP,E 10-16
C468	87-010-378-049		CAP,E 10-16
C469	87-010-378-049		CAP,E 10-16
C470	87-010-378-049		CAP,E 10-16
C471	87-010-378-049		CAP,E 10-16
C472	87-010-101-089		CAP,E 220-16 SME
C473	87-012-140-089		C-CAP,S 470P-50 CH
C474	87-010-187-089		C-CAP,S 5600P-50 B
C475	87-010-186-089		C-CAP,S 4700P-50 CH
C478	87-012-394-089		C-CAP,0.68-16,R,K
C479	87-012-393-089		C-CAP,S 0.22-16,R,K
C480	87-012-393-089		C-CAP,S 0.22-16,R,K
C481	87-010-404-049		CAP,E 4.7-50 SME
C482	87-010-404-049		CAP,E 4.7-50 SME
C483	87-012-393-089		C-CAP,S 0.22-16,R,K
C484	87-012-393-089		C-CAP,S 0.22-16,R,K
C485	87-016-081-089		C-CAP,S 0.1-16 RK
C488	87-016-081-089		C-CAP,S 0.1-16 RK
C489	87-016-081-089		C-CAP,S 0.1-16 RK
C492	87-016-081-089		C-CAP,S 0.1-16 RK
C495	87-018-134-089		CAP,TC-U 0.01-16 NYU
C671	87-010-402-049		CAP,E 2.2-50 SME
C672	87-010-402-049		CAP,E 2.2-50 SME
C673	87-010-401-049		CAP,E 1-50 SME
C674	87-010-401-049		CAP,E 1-50 SME
C675	87-010-263-049		CAP,E 100-10
C676	87-010-384-049		CAP,E 100-25 SME
C701	87-010-993-089		C-CAP,S 0.056-25 B
C702	87-010-993-089		C-CAP,S 0.056-25 B
C703	87-016-460-089		C-CAP,S 0.22-16 B
C704	87-016-460-089		C-CAP,S 0.22-16 B
C705	87-016-081-089		C-CAP,S 0.1-16 RK
C706	87-010-260-049		CAP,E 47-25 SME
C707	87-010-182-089		C-CAP,S 2200P-50 B
C708	87-010-182-089		C-CAP,S 2200P-50 B
C709	87-010-545-049		CAP E 0.22-50 SME
C710	87-010-545-049		CAP E 0.22-50 SME
C711	87-010-401-049		CAP,E 1-50 SME
C712	87-010-401-049		CAP,E 1-50 SME
C713	87-010-260-049		CAP,E 47-25 SME
C714	87-010-405-049		CAP,E 10-50 SME
C716	87-018-209-019		CAP,TC-U 0.1-50 F
C717	87-010-401-049		CAP,E 1-50 SME
C718	87-010-401-049		CAP,E 1-50 SME
C773	87-010-198-089		C-CAP,S 0.022-25 B
C871	87-012-358-089		C-CAP,S 0.47-10FZ
C872	87-010-179-089		C-CAP,S 1200P-50 B
C873	87-010-180-089		C-CAP,S 1500P-50 B
C874	87-010-180-089		C-CAP,S 1500P-50 B
C875	87-010-177-089		C-CAP,S 820P-50 SL
C876	87-010-180-089		C-CAP,S 1500P-50 B
C877	87-010-263-049		CAP,E 100-10
C878	87-010-194-089		C-CAP,S 0.047-25 F
C879	87-012-141-089		C-CAP,S 0.22-16 F
C880	87-010-179-089		C-CAP,S 1200P-50 B
C881	87-010-426-089		C-CAP,S 0.012-25 B
C883	87-010-404-049		CAP,E 4.7-50 SME
C884	87-010-263-049		CAP,E 100-10
C885	87-010-196-089		C-CAP,S 0.1-25 F
C886	87-012-156-089		C-CAP,S 220P-50 CH
C887	87-010-319-089		C-CAP,S 56P-50 CH
C888	87-010-319-089		C-CAP,S 56P-50 CH
C889	87-010-196-089		C-CAP,S 0.1-25 F
C890	87-012-358-089		C-CAP,S 0.47-10 F
C891	87-010-197-089		C-CAP,S 0.01-25 B
C892	87-010-179-089		C-CAP,S 1200P-50 B

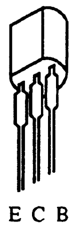
REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C894	87-012-358-089		C-CAP,S 0.47-10FZ
FT103	88-906-201-119		FF-CABLE,6P 1.25
L871	87-005-440-089		COIL,47UH FLR50
MVR771	86-NF6-651-019		VR,MOT 50KBX4EUW
R477	87-025-407-089		RES,M/F 100K-1/8W
KEY C.B			
S308	87-036-397-089		SW,TACT SKQNAB
S309	87-036-397-089		SW,TACT SKQNAB
S310	87-036-397-089		SW,TACT SKQNAB
S311	87-036-397-089		SW,TACT SKQNAB
S312	87-036-397-089		SW,TACT SKQNAB
AMP C.B			
C561	87-010-177-089		C-CAP,S 820P-50 SL
C562	87-010-177-089		C-CAP,S 820P-50 SL
C563	87-010-402-049		CAP E2.2-50 SME
C564	87-010-402-049		CAP E2.2-50 SME
C565	87-010-378-049		CAP,E 10-16
C566	87-010-378-049		CAP,E 10-16
C569	87-010-147-089		C-CAP,S 3P-50 CH
C570	87-010-147-089		C-CAP,S 3P-50 CH
C571	87-012-361-089		C-CAP,S 0.056-25 Y
C572	87-012-361-089		C-CAP,S 0.056-25 Y
C573	87-010-196-089		C-CAP,S 0.1-25 F
C574	87-010-196-089		C-CAP,S 0.1-25 F
C575	87-010-193-089		C-CAP,S 0.033-25 F
C576	87-010-193-089		C-CAP,S 0.033-25 F
C577	87-010-197-089		C-CAP,S 0.01-25 B
C578	87-010-194-089		C-CAP,S 0.047-25 F
C581	87-010-405-049		CAP,E 10-50 SME
C582	87-010-398-099		CAP,E 2200-35V
C583	87-010-398-099		CAP,E 2200-35V
C584	87-012-368-089		C-CAP,S 0.1-50F
C585	87-010-196-089		C-CAP,S 0.1-25 F
J561	87-099-803-019		JACK,PIN 3P OWR
L561	87-003-383-019		COIL,1UH-S
L562	87-003-383-019		COIL,1UH-S
R585	87-022-050-089		RESIS METAL 1W-0.22J
R586	87-022-050-089		RESIS METAL 1W-0.22J
AC C.B			
C103	87-010-197-089		C-CAP,S 0.1-25 B
R111	87-022-184-089		RES,METAL 0.33-1W
R112	87-022-184-089		RES,METAL 0.33-1W
⚠PR101	87-026-690-089		PROTECTOR,5A 125V
⚠PR102	87-026-690-089		PROTECTOR,5A 125V
PT C.B			
⚠	82-304-743-019		TERMINAL,1P
⚠F101	87-035-363-019		FUSE,1.25A 250V T E
⚠FC101	87-033-213-089		CLAMP FUSE SMK
⚠FC102	87-033-213-089		CLAMP FUSE SMK
⚠PT101	86-NFT-635-019		PT,6NF-26 EK
DECK C.B			
SFR1	87-024-581-089		SFR,3.3K DIA 6H
SOL1	82-ZM1-618-310		SOL ASSY,27
SOL2	82-ZM1-626-310		SOL ASSY,27K
SW1	87-036-378-019		SW,PUSH 1-1-1 SH2
SW2	87-036-378-019		SW,PUSH 1-1-1 SH2
SW3	87-036-378-019		SW,PUSH 1-1-1 SH2
SW4	87-036-378-019		SW,PUSH 1-1-1 SH2
SW5	87-036-378-019		SW,PUSH 1-1-1 SH2
SW6	87-036-378-019		SW,PUSH 1-1-1 SH2
SW8	87-036-378-019		SW,PUSH 1-1-1 SH2

REF. NO. PART NO. KANRI NO. DESCRIPTION

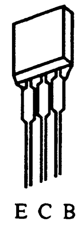
HEAD-1 C.B

HEAD-2 C.B

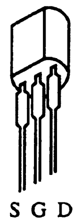
TRANSISTOR ILLUSTRATION



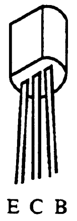
2SA1296
2SC3266
2SC2878
KTA1266
KTC3198



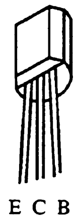
DTA114YS
DTA114ES
DTA144ES
DTA143ES
DTC144ES
DTA124ES
2SC1740(S-RS)



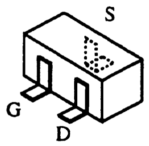
2SK246



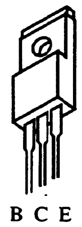
2SA952
2SD655
2SC2001(K)
2SA1015GR



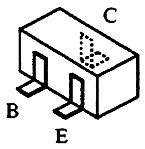
2SA1318
2SC3331



2SK543
2SK360



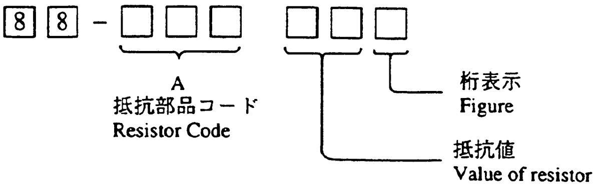
2SB1370



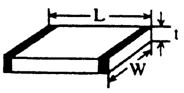
2SA1162
2SC2712
2SC2714

○チップ抵抗部品コード／CHIP RESISTOR PART CODE

チップ抵抗部品コードの成り立ち
Chip Resistor Part Coding


8 8 - □□□ □□□
A
抵抗部品コード
Resistor Code
桁表示
Figure
抵抗値
Value of resistor

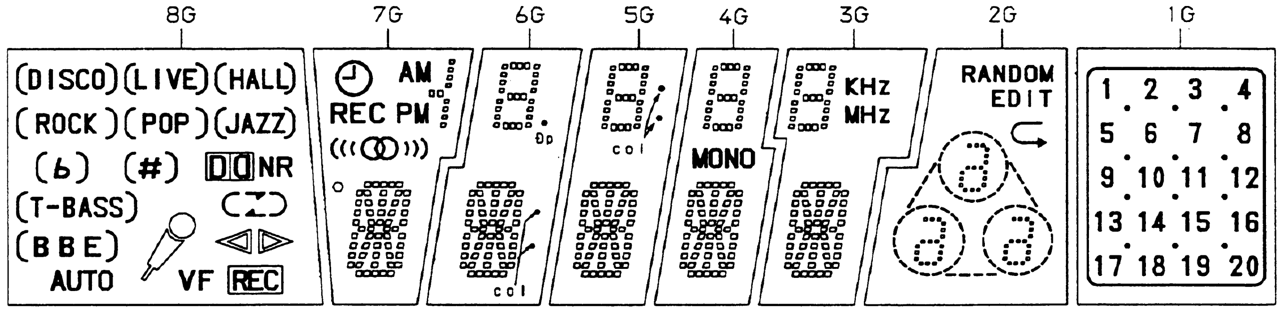
チップ抵抗
Chip resistor

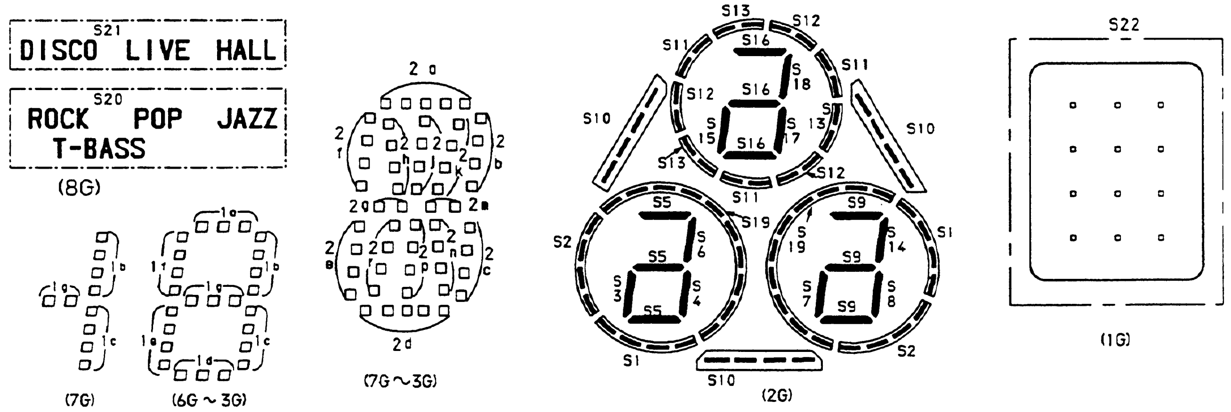
容量 Wattage	種類 Type	許容誤差 Tolerance	記号 Symbol	寸法／Dimensions (mm)				抵抗コード：A Resistor Code: A
				外形／Form	L	W	t	
1／16W	1608	±5%	CJ		1.6	0.8	0.45	108
1／10W	2125	±5%	CJ		2	1.25	0.45	118
1／8W	3216	±5%	CJ		3.2	1.6	0.55	128

FL GRID ASSIGNMENT & ANODE CONNECTION

FL, 8-ST-18GK

FL GRID ASSIGNMENT


8G
7G
6G
5G
4G
3G
2G
1G
(DISCO)(LIVE)(HALL)
(ROCK)(POP)(JAZZ)
(♭) (#) DO NR
(T-BASS)
(BBE)
AUTO
VF
REC
AM
REC PM
col
Dp
MONO
KHz
MHz
RANDOM
EDIT
1 2 3 4
5 6 7 8
9 10 11 12
13 14 15 16
17 18 19 20

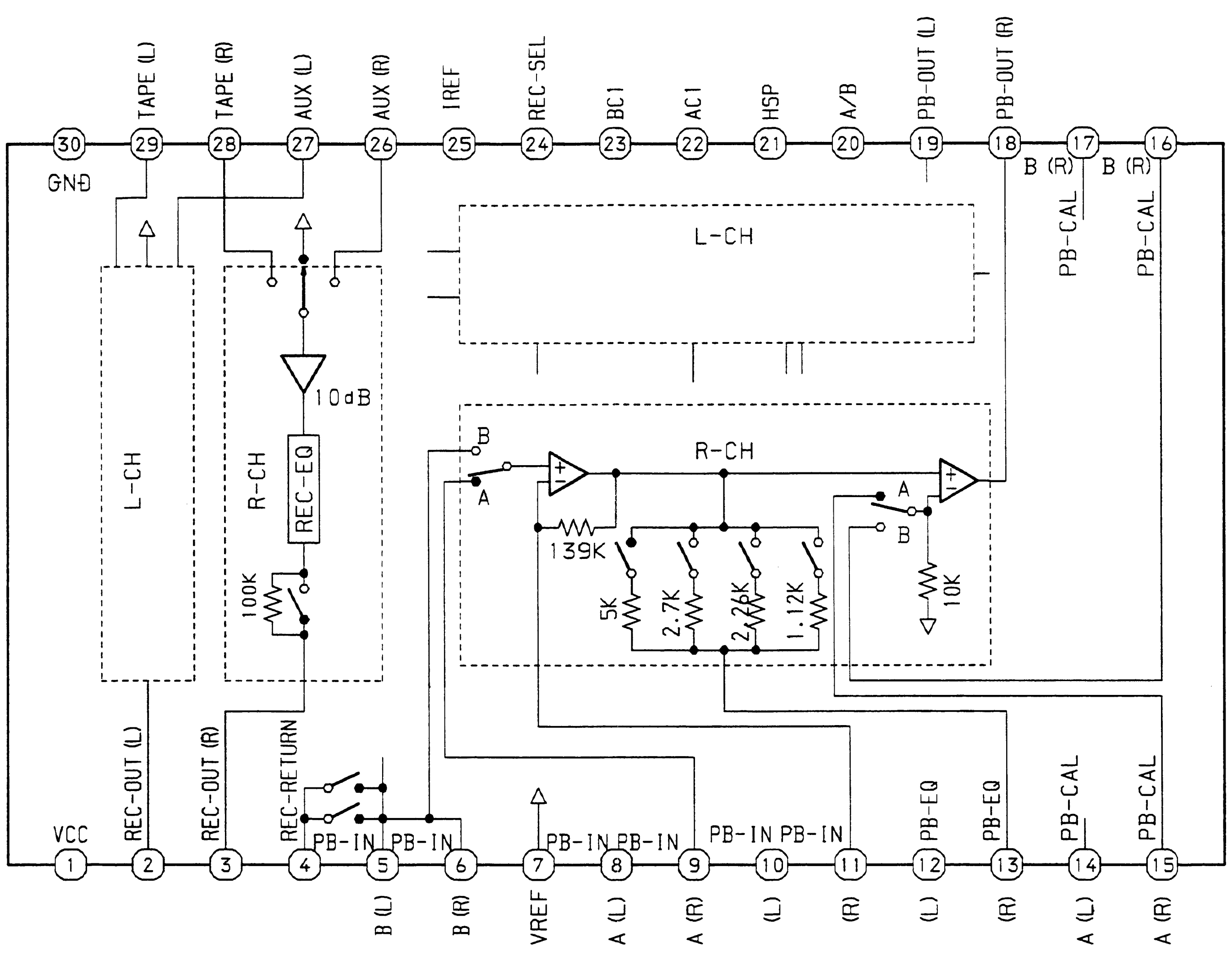

S21
DISCO LIVE HALL
S20
ROCK POP JAZZ
T-BASS
(8G)
(7G)
(6G ~ 3G)
(7G~3G)
S13
S12
S16
S11
S10
S5
S9
S1
S2
(2G)
S22
(1G)

ANODE CONNECTION

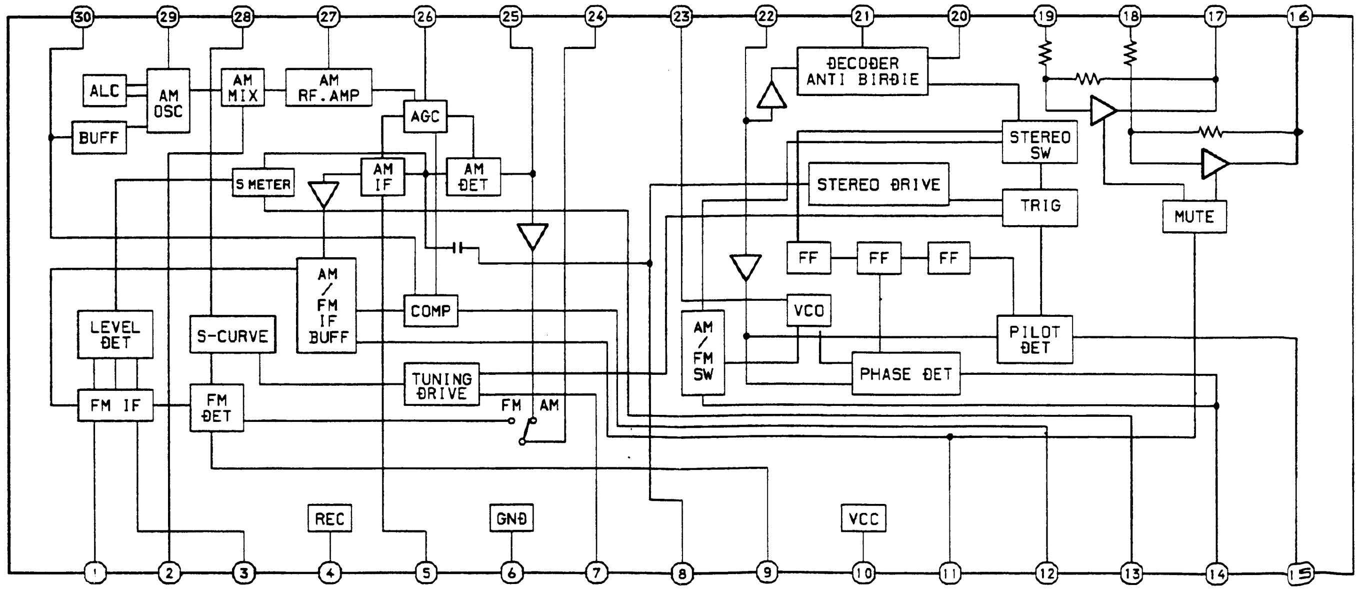
	8G	7G	6G	5G	4G	3G	2G	1G
P1	((T-BASS))	2d	2d	2d	2d	2d	S1	**20**
P2	((BBE))	2j , 2p	2j , 2p	2j , 2p	2j , 2p	2j , 2p	S2	**19**
P3	((♭))	2n	2n	2n	2n	2n	S3	**18**
P4	**AUTO**	2r	2r	2r	2r	2r	S4	**17**
P5	🎤**VF**	2c	2c	2c	2c	2c	S5	**16**
P6	((DISCO))	2e	2e	2e	2e	2e	S6	**15**
P7	((LIVE))	2m	2m	2m	2m	2m	S7	**14**
P8	((HALL))	2g	2g	2g	2g	2g	S8	**13**
P9	**REC**	2f	2f	2f	2f	2f	S9	**12**
P10	((#))	2b	2b	2b	2b	2b	S10	**11**
P11	**♭ #**	2k	2k	2k	2k	2k	S11	**10**
P12	◁	2h	2h	2h	2h	2h	S12	**9**
P13	▷	2a	2a	2a	2a	2a	S13	**8**
P14	(	○	col	col (below)	**MONO**	**MH** z	S14	**7**
P15	⇄	((◎))	Dp	col (upper)	-	**kH** z	S15	**6**
P16	)	**REC**	1d	1d	1d	1d	S16	**5**
P17	**DO NR**	🕘	1e	1e	1e	1e	S17	**4**
P18	((ROCK))	**PM**	1c	1c	1c	1c	S18	**3**
P19	((POP))	**AM**	1g	1g	1g	1g	S19	**2**
P20	((JAZZ))	1g	1f	1f	1f	1f	↪	**1**
P21	S20	1b , 1c	1b	1b	1b	1b	**EDIT**	S22
P22	S21	-	1a	1a	1a	1a	**RANDOM**	-
P23	**BBE**	-	-	-	-	-	-	-

IC BLOCK DIAGRAM – 1

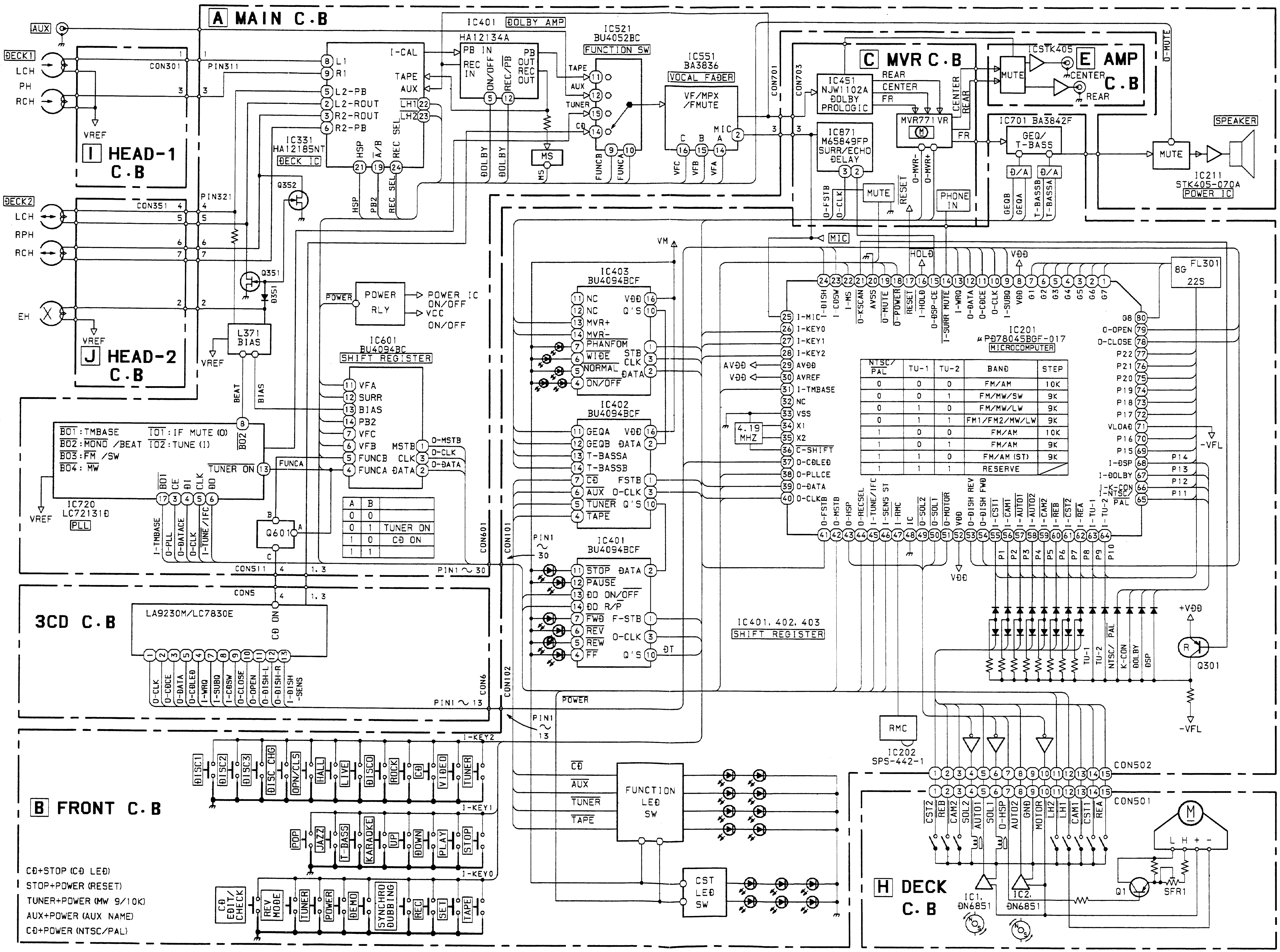
IC, HA12185NT


30 GND
29 TAPE (L)
28 TAPE (R)
27 AUX (L)
26 AUX (R)
25 IREF
24 REC-SEL
23 BC1
22 AC1
21 HSP
20 A/B
19 PB-OUT (L)
18 PB-OUT (R)
17 B (R) PB-CAL
16 B (R) PB-CAL
L-CH
R-CH
10dB
REC-EQ
100K
139K
5K
2.7K
2.26K
1.12K
10K
A
B
1 VCC
2 REC-OUT (L)
3 REC-OUT (R)
4 REC-RETURN
5 PB-IN B (L)
6 PB-IN B (R)
7 VREF
8 PB-IN A (L)
9 PB-IN A (R)
10 PB-IN (L)
11 PB-IN (R)
12 PB-EQ (L)
13 PB-EQ (R)
14 PB-CAL A (L)
15 PB-CAL A (R)

IC, LA1836L


30
29
28
27
26
25
24
23
22
21
20
19
18
17
16
ALC
AM OSC
AM MIX
AM RF.AMP
AGC
BUFF
S METER
AM IF
AM DET
DECODER ANTI BIRDIE
STEREO SW
STEREO DRIVE
TRIG
MUTE
FF
FF
FF
VCO
PILOT DET
PHASE DET
AM / FM SW
LEVEL DET
S-CURVE
AM / FM IF BUFF
COMP
TUNING DRIVE
FM AM
FM IF
FM DET
REC
GND
VCC
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15

BLOCK DIAGRAM – 1 (MAIN / FRONT)

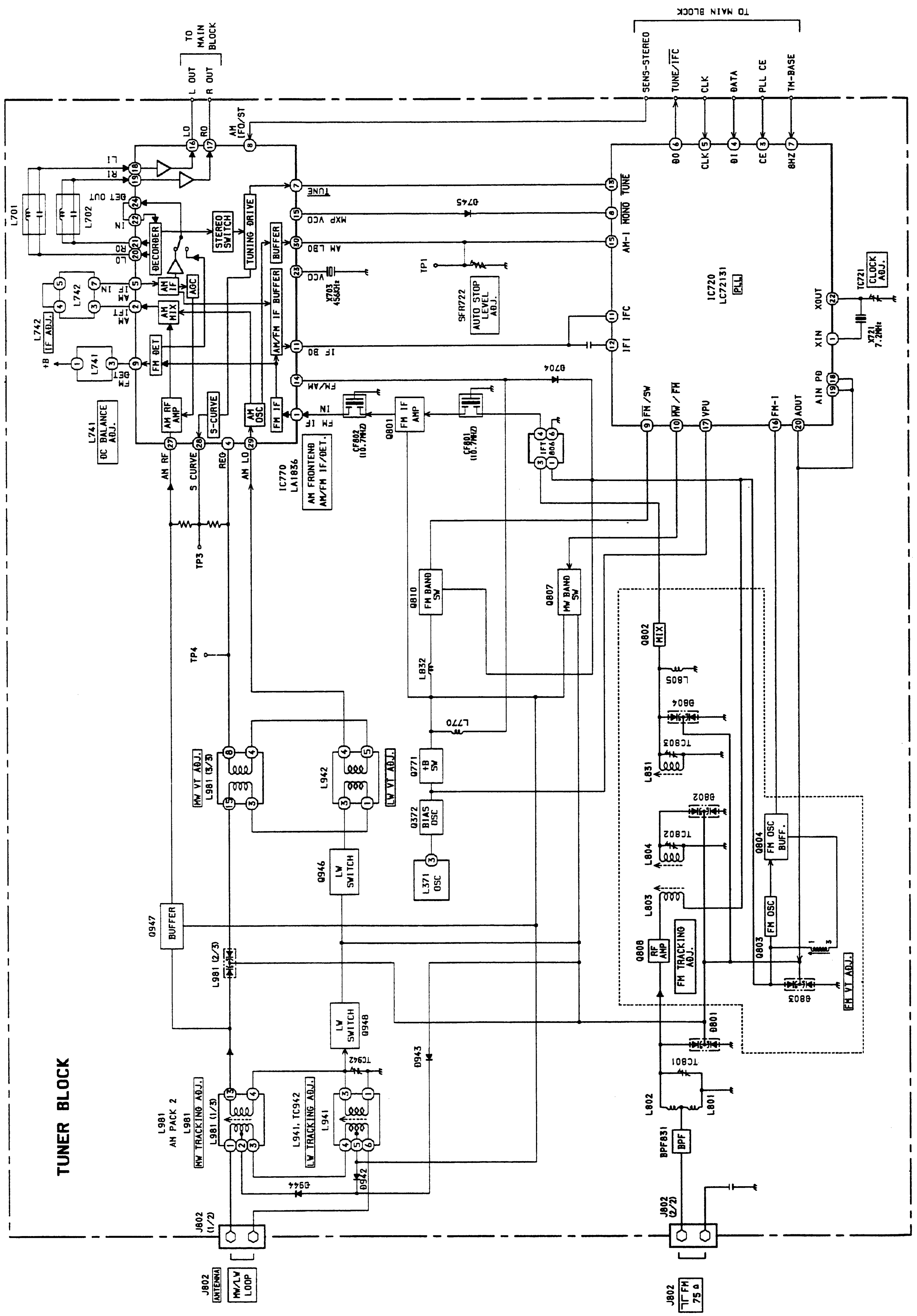

A MAIN C·B
AUX
DECK1
LCH
PH
RCH
CON301
PIN311
I HEAD-1 C·B
VREF
DECK2
LCH
RPH
RCH
EH
CON351
PIN321
J HEAD-2 C·B
IC401 DOLBY AMP
HA12134A
PB IN
REC IN
PB OUT
REC OUT
ON/OFF
REC/PB
I-CAL
TAPE
AUX
LH1
LH2
IC331
HA12185NT
DECK IC
L1
R1
L2-PB
L2-ROUT
R2-ROUT
R2-PB
HSP
A/B
REC SEL
Q352
Q351
D351
L371
BIAS
BEAT
IC521
BU4052BC
FUNCTION SW
TUNER
CD
FUNCB
FUNCA
DOLBY
MS
IC551
BA3836
VOCAL FADER
VF/MPX /FMUTE
MIC
VFC
VFB
VFA
CON701
CON703
C MVR C·B
IC451
NJW1102A
DOLBY PROLOGIC
REAR
CENTER
FR
IC871
M65849FP
SURR/ECHO DELAY
MVR771 VR
O-MVR-
O-MVR+
MUTE
RESET
PHONE IN
IC701 BA3842F
GEQ/ T-BASS
D/A
GEQB
GEQA
T-BASSB
T-BASSA
IC STK405
E AMP C·B
O-MUTE
SPEAKER
IC211
STK405-070A
POWER IC
POWER
POWER RLY
POWER IC ON/OFF
VCC ON/OFF
IC601
BU4094BC
SHIFT REGISTER
VFA
SURR
BIAS
PB2
VFC
VFB
FUNCB
FUNCA
MSTB
CLK
DATA
O-MSTB
O-CLK
O-DATA
BO1:TMBASE
BO2:MONO /BEAT
BO3:FM /SW
BO4:MW
IO1:IF MUTE (O)
IO2:TUNE (I)
TUNER ON
IC720
LC72131D
PLL
VREF
I-TMBASE
O-PLL
O-DATACE
O-CLK
I-TUNE/IFC
Q601
CON511
CON601
CON101
PIN1 ~ 30
VM
IC403
BU4094BCF
NC
MVR+
MVR-
PHANFOM
WIDE
NORMAL
ON/OFF
VDD
Q'S
STB
IC402
BU4094BCF
GEQA
GEQB
T-BASSA
T-BASSB
CD
AUX
TUNER
TAPE
FSTB
O-CLK
IC401
BU4094BCF
STOP
PAUSE
DD ON/OFF
DD R/P
FWD
REV
REW
FF
F-STB
DT
IC401, 402, 403
SHIFT REGISTER
MIC
HOLD
VDD
IC201
μPD78045BGF-017
MICROCOMPUTER
FL301
8G
22S
I-MIC
I-KEY0
I-KEY1
I-KEY2
AVDD
AVREF
I-TMBASE
NC
VSS
X1
X2
C-SHIFT
O-CDLED
O-PLLCE
O-DATA
O-CLKD
4.19 MHZ
O-DISH
I-CDSW
I-MS
O-KSCAN
AVSS
O-MUTE
O-POWER
RESET
I-HOLD
O-DSP-CE
I-SURR MUTE
I-WRQ
O-DATA
O-CDCE
O-CLK
I-SUBQ
VDD
G1
G2
G3
G4
G5
G6
G7
G8
O-OPEN
O-CLOSE
P22
P21
P20
P19
P18
P17
VLOAD
P16
P15
I-DSP
I-DOLBY
I-K-CON
I-NTSC/PAL
-VFL
P14
P13
P12
P11
O-FSTB
O-MSTB
O-HSP
O-RECSEL
I-TUNE/IFC
I-SENS ST
I-RMC
IC
O-SOL2
O-SOL1
O-MOTOR
O-DISH REV
O-DISH FWD
I-CST1
I-CAM1
I-AUTO1
I-AUTO2
I-CAM2
I-REB
I-CST2
I-REA
I-TU-1
I-TU-2
P1
P2
P3
P4
P5
P6
P7
P8
P9
P10
TU-1
TU-2
NTSC/PAL
K-CON
DOLBY
DSP
+VDD
Q301
RMC
IC202
SPS-442-1
CON502
CON5
3CD C·B
LA9230M/LC7830E
CD ON
O-CLK
O-CDCE
O-DATA
O-CDLED
I-WRQ
I-SUBQ
I-CDSW
I-CLOSE
O-OPEN
O-DISH-L
O-DISH-R
I-DISH -SENS
CON6
CON102
PIN1 ~ 13
POWER
I-KEY2
I-KEY1
I-KEY0
B FRONT C·B
DISC1
DISC2
DISC3
DISC CHG
OPN/CLS
HALL
LIVE
DISCO
ROCK
CD
VIDEO
TUNER
POP
JAZZ
T-BASS
KARAOKE
UP
DOWN
PLAY
STOP
CD EDIT/ CHECK
REV MODE
TUNER
POWER
DEMO
SYNCHRO DUBBING
REC
SET
TAPE
CD
AUX
TUNER
TAPE
FUNCTION LED SW
CST LED SW
H DECK C·B
CON501
CST2
REB
CAM2
SOL2
AUTO1
SOL1
O-HSP
AUTO2
GND
MOTOR
LH2
LH1
CAM1
CST1
REA
IC1, DN6851
IC2, DN6851
Q1
SFR1
L H + -
M

A	B	
0	0	
0	1	TUNER ON
1	0	CD ON
1	1	

NTSC/PAL	TU-1	TU-2	BAND	STEP
0	0	0	FM/AM	10K
0	0	1	FM/MW/SW	9K
0	1	0	FM/MW/LW	9K
0	1	1	FM1/FM2/MW/LW	9K
1	0	0	FM/AM	10K
1	0	1	FM/AM	9K
1	1	0	FM/AM (ST)	9K
1	1	1	RESERVE	

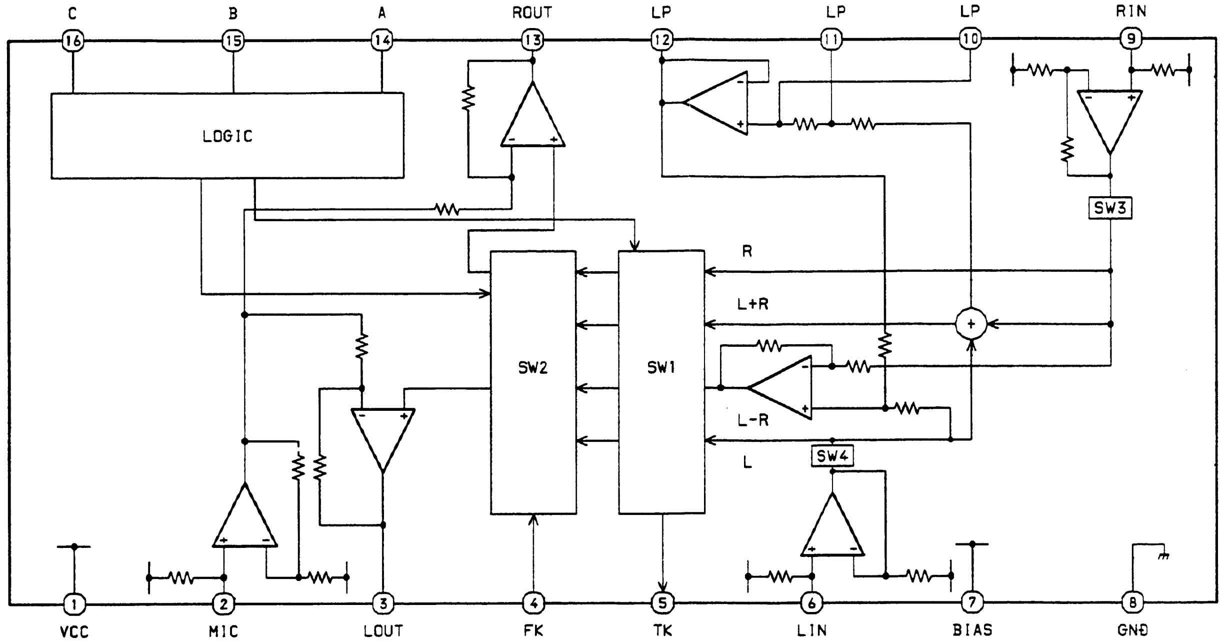
CD+STOP (CD LED)
STOP+POWER (RESET)
TUNER+POWER (MW 9/10K)
AUX+POWER (AUX NAME)
CD+POWER (NTSC/PAL)

BLOCK DIAGRAM - 2 (TUNER)

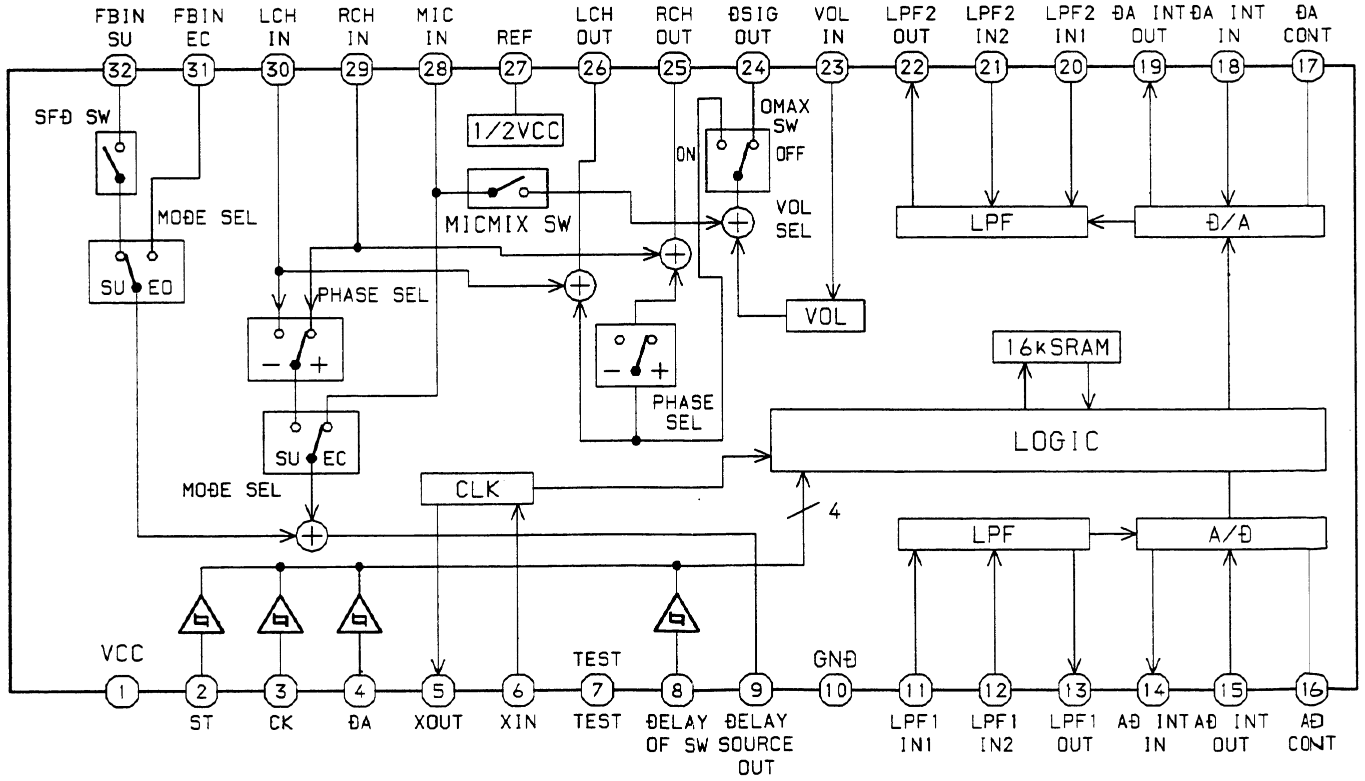

TUNER BLOCK
TO MAIN BLOCK
L OUT
R OUT
SENS-STEREO
TUNE/IFC
CLK
DATA
PLL CE
TH-BASE
IC720 LC72131 PLL
IC770 LA1836 AM FRONTEND AM/FM IF/DET.
X721 7.2MHz
TC721 CLOCK ADJ.
X703 456kHz
SFR722 AUTO STOP LEVEL ADJ.
L741 DC BALANCE ADJ.
L742 IF ADJ.
CF801 10.7MHz
CF802 10.7MHz
STEREO SWITCH
TUNING DRIVE
BUFFER
DECORDER
AM IF
AM MIX
AGC
FM DET
AM RF AMP
S-CURVE
AM OSC
FM IF
FM IF AMP
Q810 FM BAND SW
Q807 MW BAND SW
Q802 MIX
Q804 FM OSC BUFF.
Q803 FM OSC
Q808 RF AMP
FM TRACKING ADJ.
FM VT ADJ.
Q771 +B SW
Q372 BIAS OSC
L371 OSC
Q946 LW SWITCH
Q948 LW SWITCH
Q947 BUFFER
L981 MW VT ADJ.
L942 LW VT ADJ.
L981 AM PACK 2
MW TRACKING ADJ.
L941, TC942 LW TRACKING ADJ.
BPF831 BPF
J802 ANTENNA MW/LW LOOP
J802 FM 75Ω
TP1
TP3
TP4

IC BLOCK DIAGRAM - 2

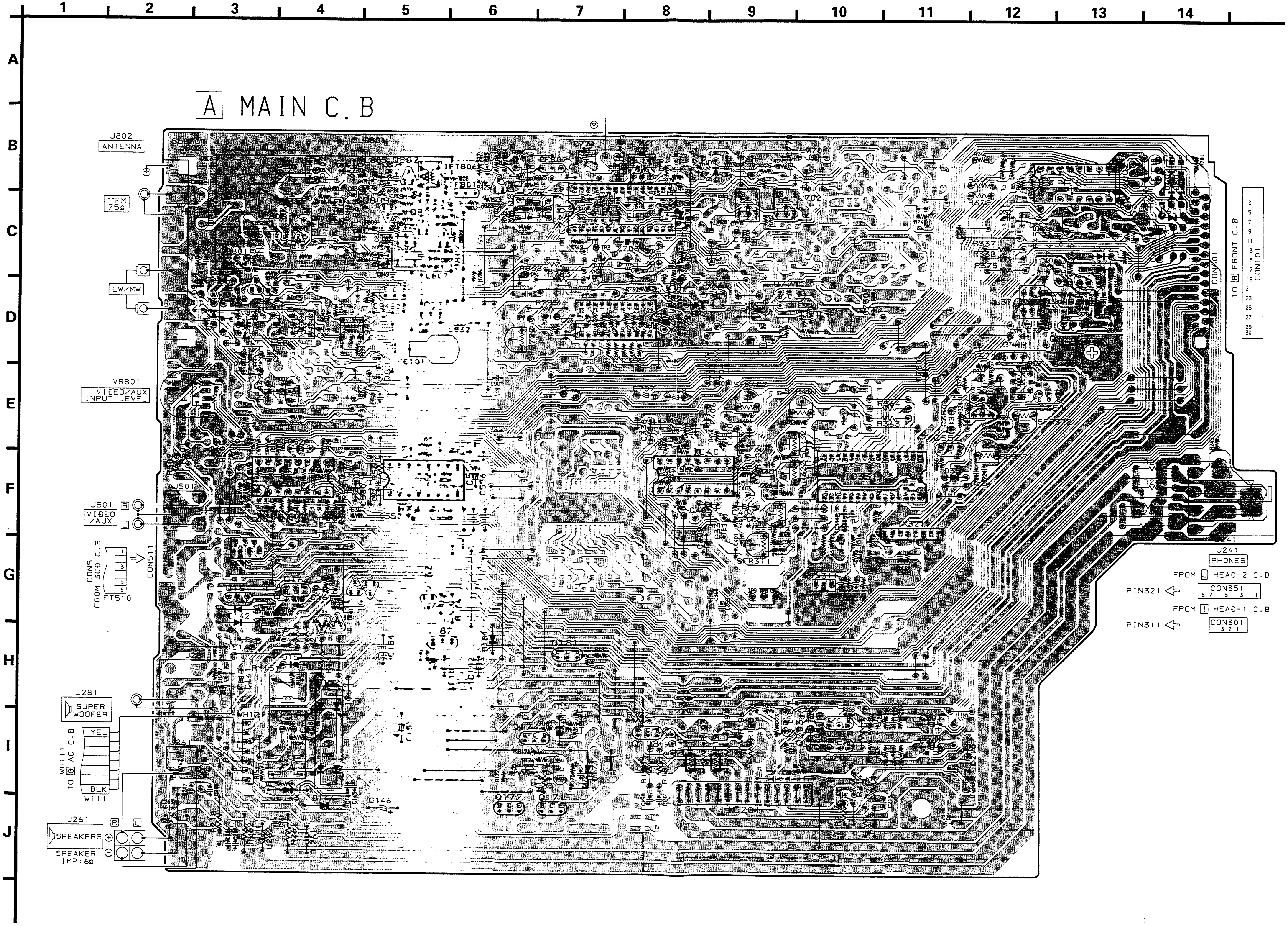
IC, BA3836


C
B
A
ROUT
LP
LP
LP
RIN
LOGIC
SW3
R
L+R
L-R
L
SW2
SW1
SW4
VCC
MIC
LOUT
FK
TK
LIN
BIAS
GND

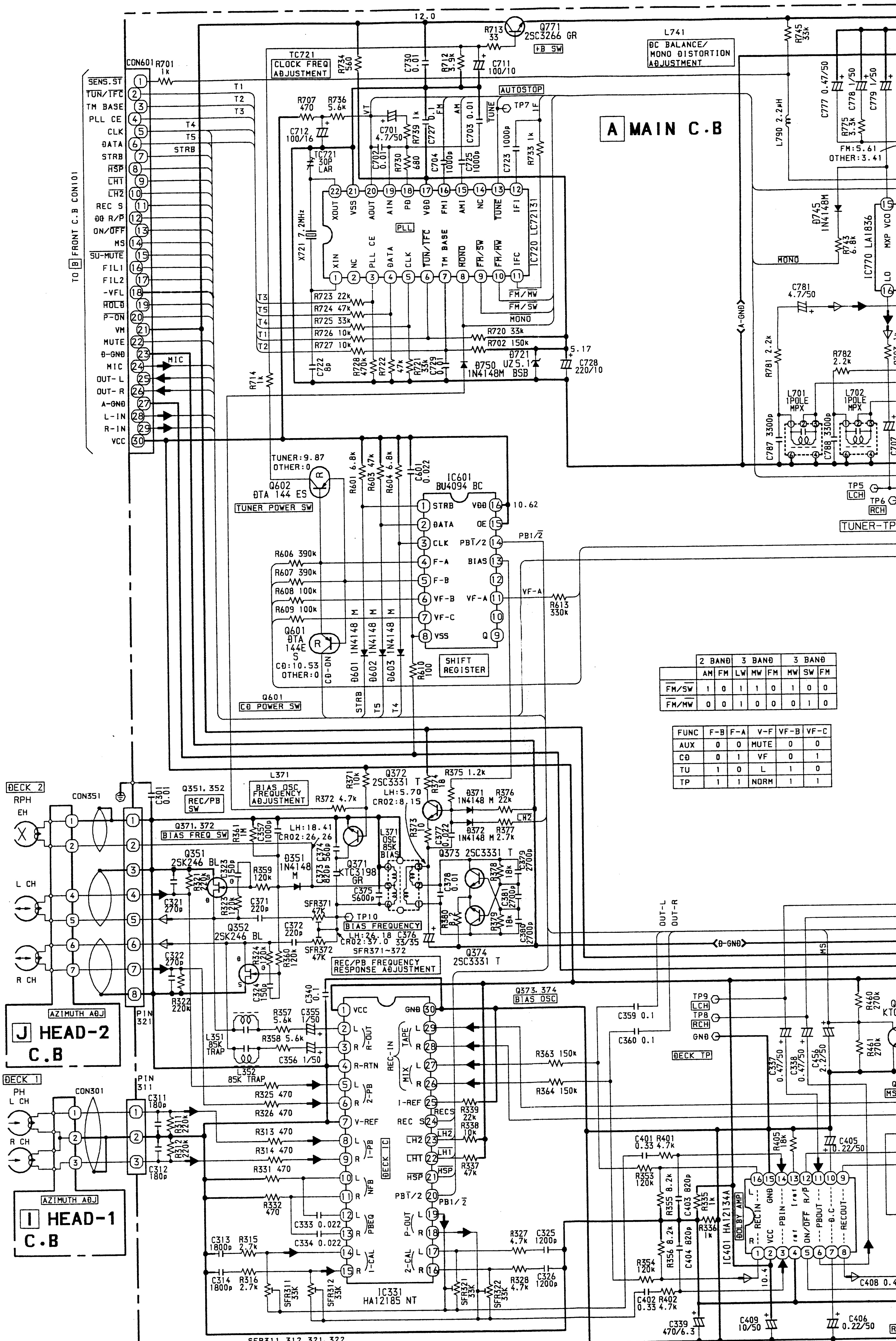
IC, M65849FP


FBIN SU
FBIN EC
LCH IN
RCH IN
MIC IN
REF
LCH OUT
RCH OUT
DSIG OUT
VOL IN
LPF2 OUT
LPF2 IN2
LPF2 IN1
DA INT OUT
DA INT IN
DA CONT
SFD SW
MODE SEL
SU EO
1/2VCC
MICMIX SW
ON
OFF
OMAX SW
VOL SEL
LPF
D/A
PHASE SEL
VOL
16kSRAM
SU EC
MODE SEL
CLK
LOGIC
4
LPF
A/D
VCC
ST
CK
DA
XOUT
XIN
TEST
DELAY OF SW
DELAY SOURCE OUT
GND
LPF1 IN1
LPF1 IN2
LPF1 OUT
AD INT IN
AD INT OUT
AD CONT

WIRING – 1 (MAIN)


1
2
3
4
5
6
7
8
9
10
11
12
13
14
A
B
C
D
E
F
G
H
I
J
A MAIN C.B
J802
ANTENNA
FM 75Ω
LW/MW
VR801
VIDEO/AUX INPUT LEVEL
J501
R
VIDEO /AUX
L
CON5 FROM 3CD C.B
FT510
CON511
J281
SUPER WOOFER
WH111 : TO G AC C.B
YEL
BLK
W111
J261
SPEAKERS
R
L
SPEAKER IMP: 6Ω
J241
PHONES
FROM J HEAD-2 C.B
PIN321
CON351
8 7 5 3 1
FROM I HEAD-1 C.B
PIN311
CON301
3 2 1
TO B FRONT C.B
CON101
CON601
1
3
5
7
9
11
13
15
17
19
21
23
25
27
29
30
IC281
IC401
IC331
Q171
Q172
Q201
Q202
Q108
C146
D142
D141
SL870
SL080
R337
R338
R363
R608

SCHEMATIC DIAGRAM – 1 (MAIN)

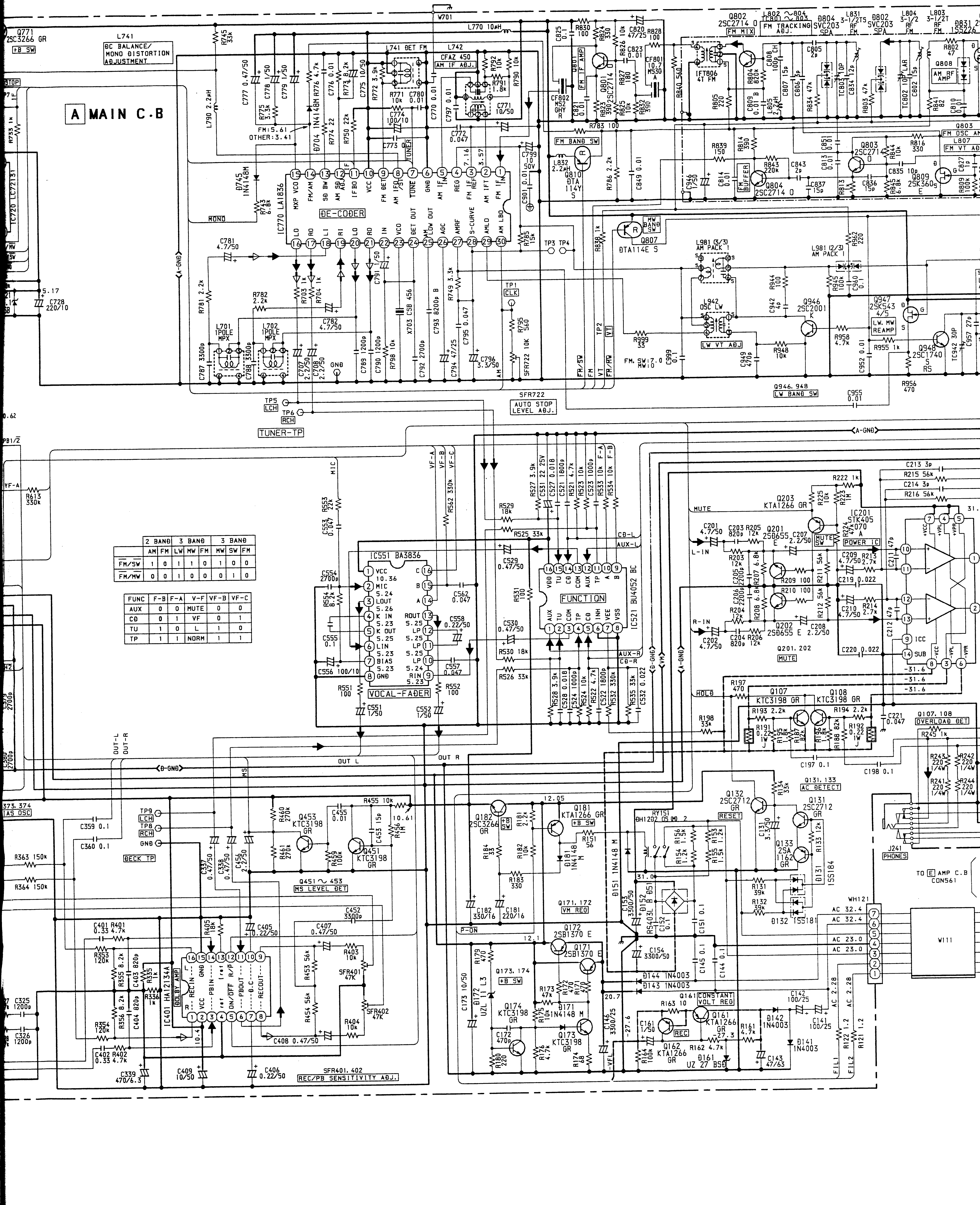


A MAIN C.B
TO B FRONT C.B CON101
CON601
SENS.ST
TUN/IFC
TM BASE
PLL CE
CLK
DATA
STRB
HSP
CHT
LH2
REC S
DD R/P
ON/OFF
MS
SU-MUTE
FIL1
FIL2
-VFL
HOLD
P-ON
VM
MUTE
D-GND
MIC
OUT-L
OUT-R
A-GND
L-IN
R-IN
VCC
12.0
R713 33
Q771 2SC3266 GR
+B SW
L741
DC BALANCE/ MONO DISTORTION ADJUSTMENT
TC721 CLOCK FREQ ADJUSTMENT
AUTOSTOP
TP7
IC720 LC72131
PLL
X721 7.2MHz
TC721 30P LAR
MONO
FM/MW
FM/SW
5.17
D750 1N4148M
D721 UZ5.1 BSB
C728 220/10
FM:5.61
OTHER:3.41
D745 1N4148M
IC770 LA1836
MXP VCO
C781 4.7/50
L701 1POLE MPX
L702 1POLE MPX
TP5 LCH
TP6 RCH
TUNER-TP
TUNER:9.87
OTHER:0
Q602 DTA 144 ES
TUNER POWER SW
IC601 BU4094 BC
10.62
PB1/2
VF-A
R613 330k
SHIFT REGISTER
Q601 DTA 144E S
CD:10.53
OTHER:0
Q601 CD POWER SW
D601 1N4148 M
D602 1N4148 M
D603 1N4148 M
DECK 2
RPH
EH
L CH
R CH
CON351
Q351, 352 REC/PB SW
Q371, 372 BIAS FREQ SW
L371 BIAS OSC FREQUENCY ADJUSTMENT
Q372 2SC3331 T
LH:5.70
CR02:8.15
LH:18.41
CR02:26.26
Q371 KTC3198 GR
Q351 2SK246 BL
Q352 2SK246 BL
D351 1N4148 M
D371 1N4148 M
D372 1N4148 M
Q373 2SC3331 T
Q374 2SC3331 T
L371 OSC 85K BIAS
TP10
BIAS FREQUENCY
LH:26.18
CR02:37.0
REC/PB FREQUENCY RESPONSE ADJUSTMENT
SFR371~372
Q373, 374 BIAS OSC
AZIMUTH ADJ
J HEAD-2 C.B
PIN 321
L351 85K TRAP
L352 85K TRAP
DECK 1
PH
L CH
R CH
CON301
PIN 311
AZIMUTH ADJ
I HEAD-1 C.B
IC331 HA12185 NT
DECK IC
SFR311, 312, 321, 322 PB SENSITIVITY ADJ.
TP9 LCH
TP8 RCH
GND
DECK TP
OUT-L
OUT-R
D-GND
A-GND
IC401 HA12134A
DOLBY AMP
C339 470/6.3
C409 10/50
C406 0.22/50
C408 0.4

	2 BAND		3 BAND			3 BAND		
	AM	FM	LW	MW	FM	MW	SW	FM
$\overline{FM}/\overline{SW}$	1	0	1	1	0	1	0	0
$\overline{FM}/\overline{MW}$	0	0	1	0	0	0	1	0

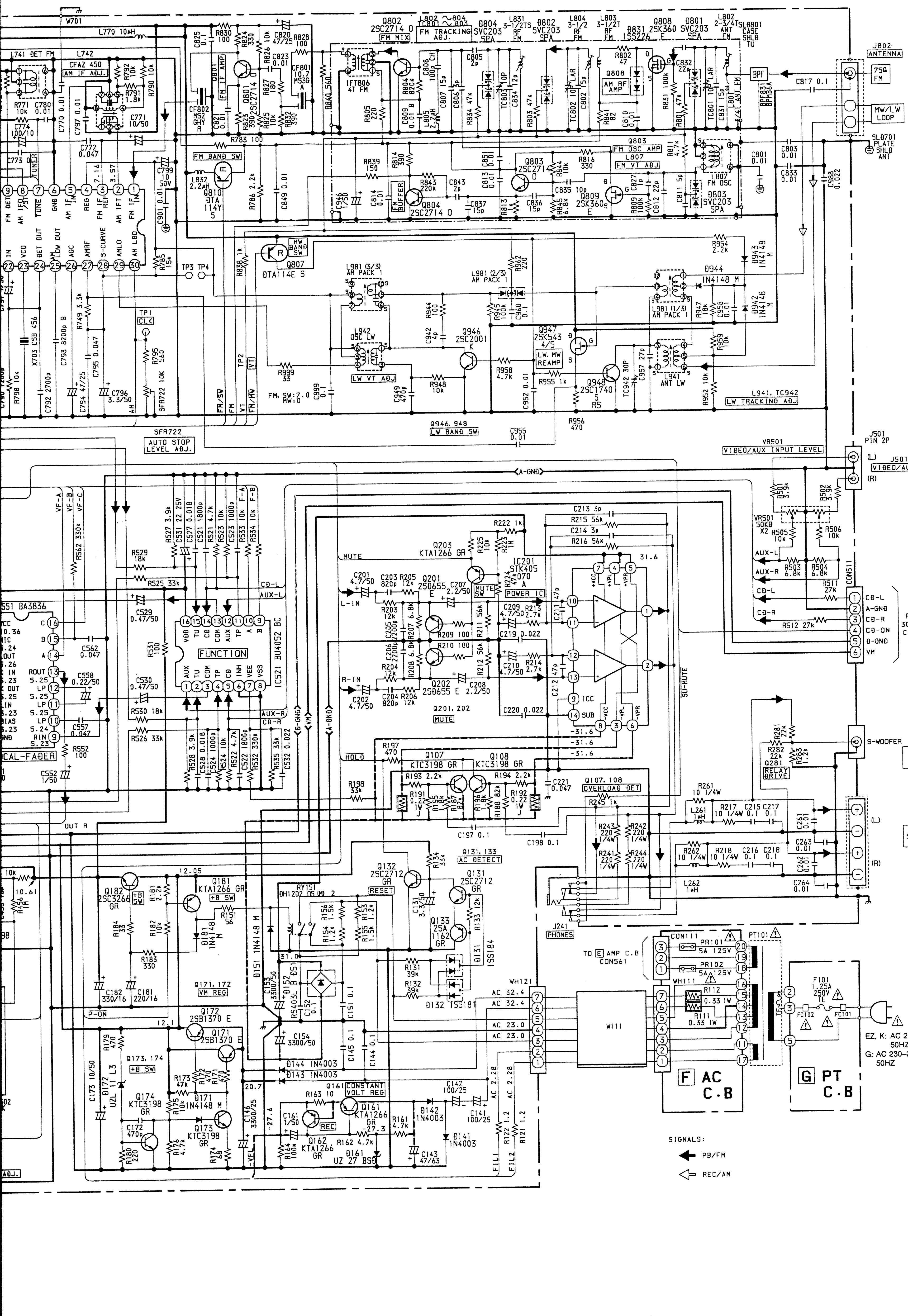
FUNC	F-B	F-A	V-F	VF-B	VF-C
AUX	0	0	MUTE	0	0
CD	0	1	VF	0	1
TU	1	0	L	1	0
TP	1	1	NORM	1	1

AIWA 7544

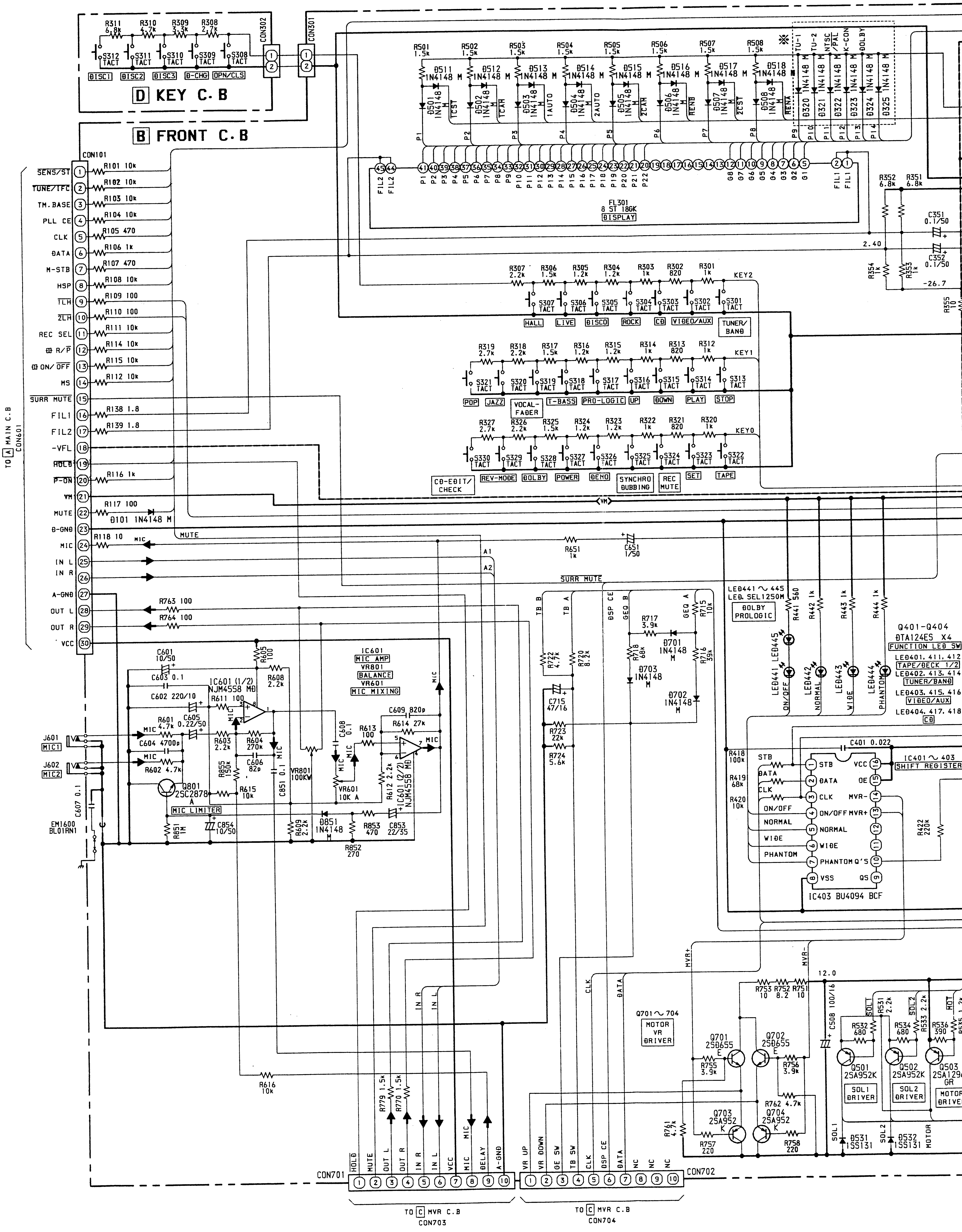

A MAIN C.B
Q771 2SC3266 GR
+B SW
L741
DC BALANCE/ MONO DISTORTION ADJUSTMENT
W701
L770 10μH
L741 DET FM
L742 CFAZ 450 AM IF ADJ.
FM:5.61 OTHER:3.41
IC770 LA1836
DE-CODER
MONO
TP3 TP4
TP1 CLK
L701 1POLE MPX
L702 1POLE MPX
SFR722 AUTO STOP LEVEL ADJ.
TP5 LCH
TP6 RCH
TUNER-TP
Q802 2SC2714 O
FM MIX
L802 ~ 804 TC801 ~ 803 FM TRACKING ADJ.
Q804 SVC203 SPA
Q808 AM RF AMP
FM IF AMP
Q801 2SC2714 O
CF801 10.7 MS3G
CF802 MS2 GHY
IFT806 4T FM
FM BAND SW
Q810 DTA 114Y S
Q803 2SC2714 O
FM OSC AMP
FM VT ADJ
Q809 2SK360
Q804 2SC2714 O
FM BUFFER
Q807 DTA114E S
MW BAND SW
L981 (3/3) AM PACK I
L981 (2/3) AM PACK I
L942 OSC LW
LW VT ADJ
Q946 2SC2001 K
Q947 2SK543 4/5
LW. MW REAMP
Q948 2SC1740 S RS
Q946, 948 LW BAND SW
FM. SW:7.0 MW:0
MIC
VF-A VF-B VF-C
IC551 BA3836
VOCAL-FADER
IC521 BU4052 BC
FUNCTION
CD-L AUX-L AUX-R CD-R
A-GND
D-GND
B-GND
OUT L
OUT R
MUTE
Q203 KTA1266 GR
IC201 STK405 -070 A
POWER IC
Q201 2SD655 E
Q202 2SD655 E
Q201, 202 MUTE
L-IN
R-IN
HOLD
Q107 KTC3198 GR
Q108 KTC3198 GR
Q107, 108 OVERLOAD DET
J241 PHONES
TO E AMP C.B CON561
WH121
W111
AC 32.4
AC 23.0
TP9 LCH
TP8 RCH
DECK TP
Q453 KTC3198 GR
Q451 KTC3198 GR
Q451 ~ 453 MS LEVEL DET
IC401 HA12134A
DOLBY AMP
SFR401 47K
SFR402 47K
SFR401, 402 REC/PB SENSITIVITY ADJ.
Q182 2SC3266 GR
+B SW
Q181 KTA1266 GR
+B SW
Q171, 172 VM REG
Q172 2SB1370 E
Q171 2SB1370 E
Q173, 174 +B SW
Q174 KTC3198 GR
Q173 KTC3198 GR
P-ON
Q132 2SC2712 GR
RESET
Q131, 133 AC DETECT
Q131 2SC2712 GR
Q133 2SA 1162 GR
RY151 DH1202 05 MD 2
D151 1N4148 M
D144 1N4003
D143 1N4003
Q161 CONSTANT VOLT REG
Q161 KTA1266 GR
Q162 KTA1266 GR
REC
D161 UZ 27 BSD
D142 1N4003
D141 1N4003
D131 1SS184
D132 1SS181
L373, 374 BIAS OSC
IC720 LC72131

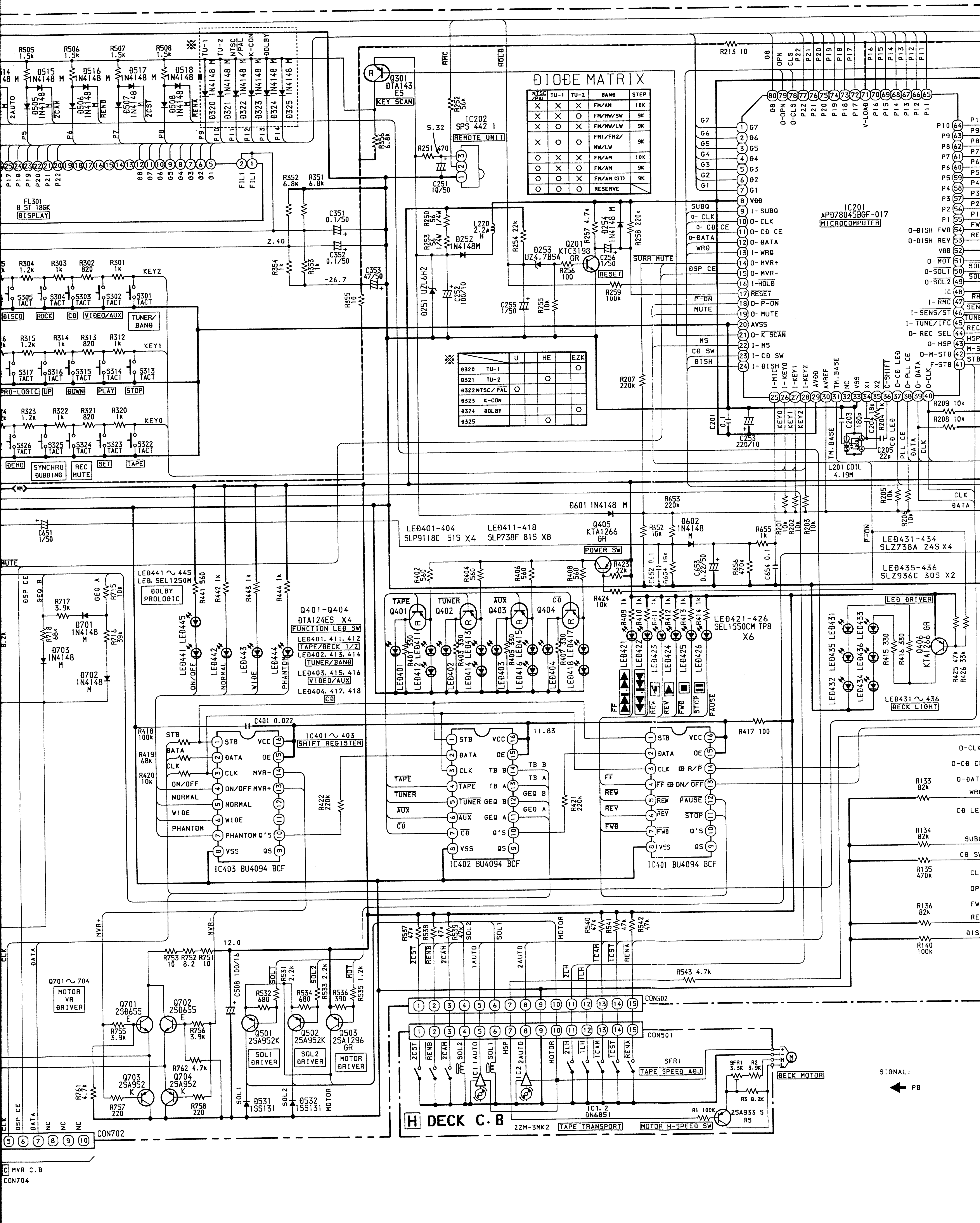
	2 BAND		3 BAND			3 BAND		
	AM	FM	LW	MW	FM	MW	SW	FM
$\overline{FM}/\overline{SW}$	1	0	1	1	0	1	0	0
$\overline{FM}/\overline{MW}$	0	0	1	0	0	0	1	0

FUNC	F-B	F-A	V-F	VF-B	VF-C
AUX	0	0	MUTE	0	0
CD	0	1	VF	0	1
TU	1	0	L	1	0
TP	1	1	NORM	1	1


W701
L770 10μH
L741 DET FM
L742
CFAZ 450
AM IF ADJ.
Q802 2SC2714 O
FM MIX
FM TRACKING ADJ.
Q801 2SC2714 O
FM IF AMP
Q808 AM RF AMP
Q803 FM OSC AMP
L807 FM VT ADJ
Q804 2SC2714 O
BUFFER
Q809 2SK360 G
FM BAND SW
Q810 DTA114Y S
Q807 DTA114E S
MW BAND SW
J802 ANTENNA
75Ω FM
MW/LW LOOP
SL0701 PLATE SHLD ANT
BPF
L981 (3/3) AM PACK 1
L981 (2/3) AM PACK 1
L981 (1/3) AM PACK 1
L942 OSC LW
LW VT ADJ
Q946 2SC2001
Q947 2SK543 4/5
LW. MW REAMP
Q948 2SC1740 S R5
L941 ANT LW
L941, TC942 LW TRACKING ADJ
Q946, 948 LW BAND SW
TP1 CLK
TP3 TP4
SFR722 AUTO STOP LEVEL ADJ.
FM. SW: 7.0 MW: 0
J501 PIN 2P
J501 VIDEO/AUX
VR501 VIDEO/AUX INPUT LEVEL
VR501 50KB X2
AUX-L
AUX-R
CON511
CD-L
A-GND
CD-R
CD-ON
D-GND
VM
FROM 3CD C.B CONS
A-GND
IC521 BU4052 BC
FUNCTION
IC551 BA3836
LOCAL-FADER
MUTE
Q203 KTA1266 GR
IC201 STK405-070 A
POWER IC
Q201 2SD655 E
Q202 2SD655 E
Q201, 202 MUTE
L-IN
R-IN
SD-MUTE
HOLD
Q107 KTC3198 GR
Q108 KTC3198 GR
Q107, 108 OVERLOAD DET
S-WOOFER
J281 SUPER WOOFER
Q281 RELAY DRIVE
J261 SPEAKERS
IMP: 6Ω
(L)
(R)
Q131, 133 AC DETECT
Q132 2SC2712 GR
RESET
Q131 2SC2712 GR
Q133 2SA1162 GR
RY151 DH1202 05(M) 2
Q182 2SC3266 GR
+B SW
Q181 KTA1266 GR
+B SW
Q171, 172 VM REG
Q172 2SB1370 E
Q171 2SB1370 E
Q173, 174 +B SW
Q174 KTC3198 GR
Q173 KTC3198 GR
Q161 CONSTANT VOLT REG
Q161 KTA1266 GR
Q162 KTA1266 GR
D161 UZ 27 BSB
J241 PHONES
P-ON
OUT R
WH121
WH111
W111
CON111
PR101 5A 125V
PR102 5A 125V
TO E AMP C.B CON561
PT101
F101 1.25A 250V TE
EZ, K: AC 230V 50HZ
G: AC 230-240V 50HZ
F AC C·B
G PT C·B
SIGNALS:
PB/FM
REC/AM

SCHEMATIC DIAGRAM – 2 (FRONT)


D KEY C.B
B FRONT C.B
CON302
CON301
CON101
R311 6.8k
R310 4.7k
R309 3.3k
R308 2.7k
S312 TACT
S311 TACT
S310 TACT
S309 TACT
S308 TACT
DISC1
DISC2
DISC3
D-CHG
OPN/CLS
SENS/ST
TUNE/IFC
TM.BASE
PLL CE
CLK
DATA
M-STB
HSP
1LH
2LH
REC SEL
D R/P
D ON/OFF
MS
SURR MUTE
FIL1
FIL2
-VFL
HOLD
P-ON
VM
MUTE
D-GND
MIC
IN L
IN R
A-GND
OUT L
OUT R
VCC
TO A MAIN C.B CON601
R101 10k
R102 10k
R103 10k
R104 10k
R105 470
R106 1k
R107 470
R108 10k
R109 100
R110 100
R111 10k
R114 10k
R115 10k
R112 10k
R138 1.8
R139 1.8
R116 1k
R117 100
D101 1N4148 M
R118 10
R763 100
R764 100
R501 1.5k
R502 1.5k
R503 1.5k
R504 1.5k
R505 1.5k
R506 1.5k
R507 1.5k
R508 1.5k
D511 1N4148 M
D512 1N4148 M
D513 1N4148 M
D514 1N4148 M
D515 1N4148 M
D516 1N4148 M
D517 1N4148 M
D518 1N4148
D501 1N4148 M
D502 1N4148 M
D503 1N4148 M
D504 1N4148 M
D505 1N4148 M
D506 1N4148 M
D507 1N4148 M
D508 1N4148 M
TCST
TCAN
1AUTO
2AUTO
2CAN
RENB
2CST
RENA
TU-1
TU-2
NTSC /PAL
K-CON
DOLBY
D320 1N4148 M
D321 1N4148 M
D322 1N4148 M
D323 1N4148 M
D324 1N4148 M
D325 1N4148 M
FL301 8 ST 18GK
DISPLAY
R352 6.8k
R351 6.8k
C351 0.1/50
C352 0.1/50
R354 1k
R353 1k
2.40
-26.7
R355
R307 2.2k
R306 1.5k
R305 1.2k
R304 1.2k
R303 1k
R302 820
R301 1k
KEY2
S307 TACT
S306 TACT
S305 TACT
S304 TACT
S303 TACT
S302 TACT
S301 TACT
HALL
LIVE
DISCO
ROCK
CD
VIDEO/AUX
TUNER/ BAND
R319 2.7k
R318 2.2k
R317 1.5k
R316 1.2k
R315 1.2k
R314 1k
R313 820
R312 1k
KEY1
S321 TACT
S320 TACT
S319 TACT
S318 TACT
S317 TACT
S316 TACT
S315 TACT
S314 TACT
S313 TACT
POP
JAZZ
VOCAL-FADER
T-BASS
PRO-LOGIC
UP
DOWN
PLAY
STOP
R327 2.7k
R326 2.2k
R325 1.5k
R324 1.2k
R323 1.2k
R322 1k
R321 820
R320 1k
KEY0
S330 TACT
S329 TACT
S328 TACT
S327 TACT
S326 TACT
S325 TACT
S324 TACT
S323 TACT
S322 TACT
CD-EDIT/ CHECK
REV-MODE
DOLBY
POWER
DEMO
SYNCHRO DUBBING
REC MUTE
SET
TAPE
R651 1k
C651 1/50
SURR MUTE
A1
A2
C601 10/50
C603 0.1
C602 220/10
IC601 (1/2) NJM4558 MD
R611 100
R605 100
R608 2.2k
R601 4.7k
C605 0.22/50
C604 4700p
R603 2.2k
R604 270k
R602 4.7k
C606 82p
R855 150k
R615 10k
C851 0.1
Q801 2SC2878 A
MIC LIMITER
R851 1M
C854 10/50
J601 MIC1
J602 MIC2
C607 0.1
EM1600 BL01RN1
IC601 MIC AMP
VR801 BALANCE
VR601 MIC MIXING
C608 0.1
R613 100
C609 820p
R614 27k
VR801 100KW
VR601 10K A
R612 2.2k
IC601 (2/2) NJM4558 MD
R609 2.2k
D851 1N4148 M
R853 470
C853 22/35
R852 270
R616 10k
TB B
TB A
DSP CE
GEQ B
GEQ A
R715 10k
R717 3.9k
D701 1N4148 M
R722 4.7k
R720 8.2k
R718 68k
D703 1N4148 M
R716 39k
D702 1N4148 M
C715 47/16
R723 22k
R724 5.6k
LED441 ~ 445 LED SEL1250M
DOLBY PROLOGIC
R441 560
R442 1k
R443 1k
R444 1k
LED445
LED441 ON/OFF
LED442 NORMAL
LED443 WIDE
LED444 PHANTOM
Q401-Q404 DTA124ES X4
FUNCTION LED SW
LED401, 411, 412 TAPE/DECK 1/2
LED402, 413, 414 TUNER/BAND
LED403, 415, 416 VIDEO/AUX
LED404, 417, 418 CD
R418 100k
R419 68k
R420 10k
C401 0.022
IC401 ~ 403 SHIFT REGISTER
STB
DATA
CLK
ON/OFF
NORMAL
WIDE
PHANTOM
VCC
OE
MVR-
MVR+
PHANTOM Q'S
VSS
QS
IC403 BU4094 BCF
R422 220k
MVR+
MVR-
12.0
R753 10
R752 8.2
R751 10
C508 100/16
Q701 ~ 704 MOTOR VR DRIVER
Q701 2SD655
Q702 2SD655
R755 3.9k
R756 3.9k
R762 4.7k
Q703 2SA952
Q704 2SA952
R761 4.7k
R757 220
R758 220
SOL1
SOL2
R531 2.2k
R532 680
R534 680
R536 390
Q501 2SA952K
Q502 2SA952K
Q503 2SA129
SOL1 DRIVER
SOL2 DRIVER
MOTOR DRIVER
D531 1SS131
D532 1SS131
MOTOR
CLK
DATA
IN R
IN L
MIC
R779 1.5k
R770 1.5k
HOLD
MUTE
OUT L
OUT R
IN R
IN L
VCC
MIC
DELAY
A-GND
CON701
TO C MVR C.B CON703
VR UP
VR DOWN
GE SW
TB SW
CLK
DSP CE
DATA
NC
NC
NC
CON702
TO C MVR C.B CON704

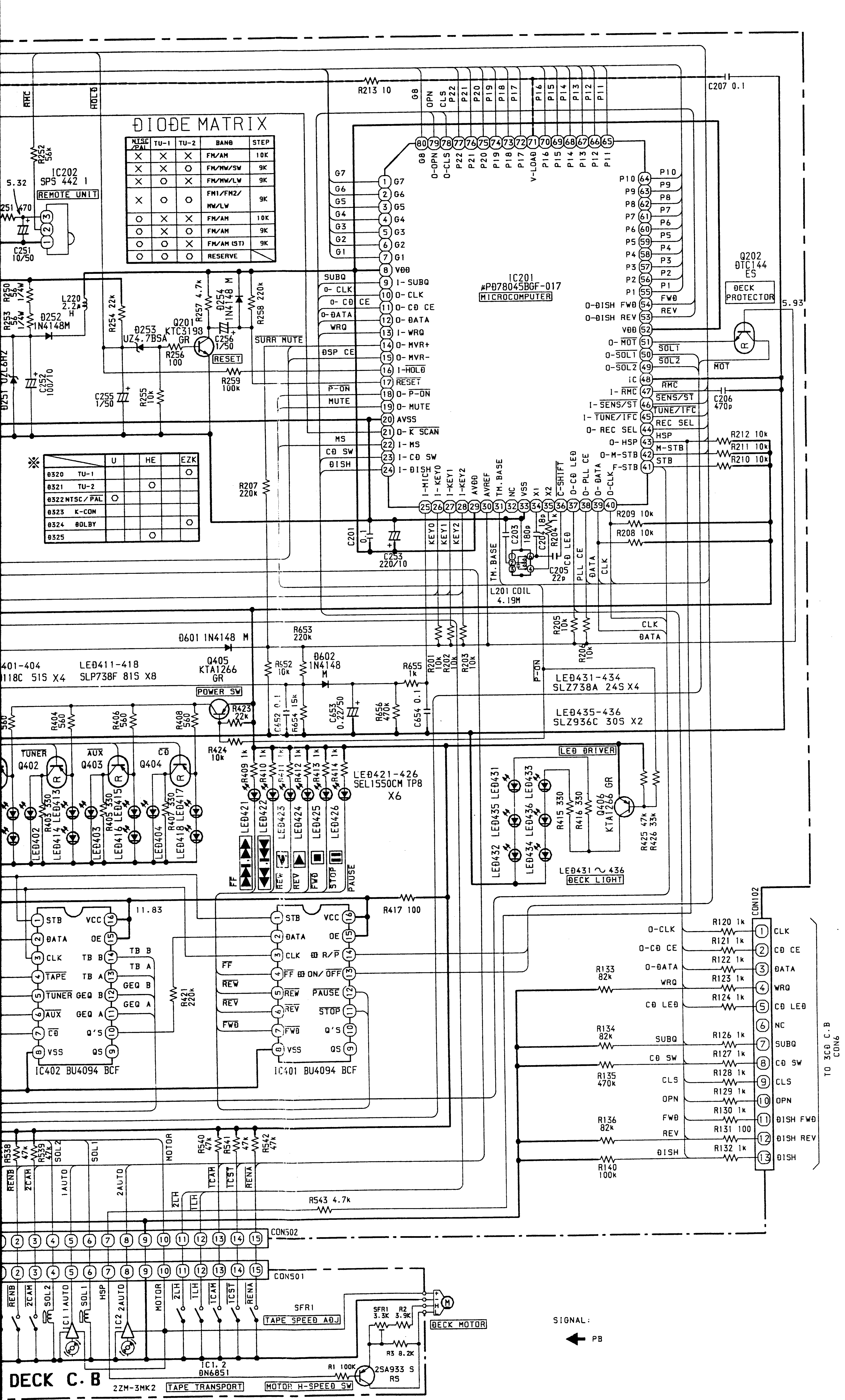

R505 1.5k
R506 1.5k
R507 1.5k
R508 1.5k
D515 1N4148 M
D516 1N4148 M
D517 1N4148 M
D518 1N4148 M
D505 1N4148 M
D506 1N4148 M
D507 1N4148 M
D508 1N4148 M
2AUTO
2CAM
RENB
2CST
RENA
TU-1
TU-2
NTSC /PAL
K-CON
DOLBY
D320 1N4148 M
D321 1N4148 M
D322 1N4148 M
D323 1N4148 M
D324 1N4148 M
D325 1N4148 M
P5 P6 P7 P8 P9 P10 P11 P12 P13 P14
FL301
8 ST 18GK
DISPLAY
FIL1
FIL1
R
Q301
DTA143 ES
KEY SCAN
R356 6.8k
RMC
HOLD
R252 56k
IC202
SPS 442 1
REMOTE UNIT
5.32
R251 470
C251 10/50
R352 6.8k
R351 6.8k
C351 0.1/50
C352 0.1/50
2.40
-26.7
R354 1k
R353 1k
C353 47/50
R355 10
R304 1.2k
R303 1k
R302 820
R301 1k
KEY2
S305 TACT
S304 TACT
S303 TACT
S302 TACT
S301 TACT
DISCO
ROCK
CD
VIDEO/AUX
TUNER/ BAND
R315 1.2k
R314 1k
R313 820
R312 1k
KEY1
S317 TACT
S316 TACT
S315 TACT
S314 TACT
S313 TACT
PRO-LOGIC
UP
DOWN
PLAY
STOP
R323 1.2k
R322 1k
R321 820
R320 1k
KEY0
S326 TACT
S325 TACT
S324 TACT
S323 TACT
S322 TACT
DEMO
SYNCHRO DUBBING
REC MUTE
SET
TAPE
VM
R250 56 1/4W
L220 2.2μH
D252 1N4148M
R253 56 1/4W
D251 UZL6H2
C252 100/10
R254 22k
D253 UZ4.7BSA
Q201 KTC3198 GR
R256 100
R257 4.7k
D254 1N4148 M
R258 220k
C256 1/50
RESET
SURR MUTE
R259 100k
C255 1/50
R255 10k
R213 10
G8 OPN CLS P22 P21 P20 P19 P18 P17 P16 P15 P14 P13 P12 P11
G7 G6 G5 G4 G3 G2 G1
SUBQ
O- CLK
O- CD CE
O-DATA
WRQ
DSP CE
P-ON
MUTE
MS
CD SW
DISH
IC201
μPD78045BGF-017
MICROCOMPUTER
VDD
I- SUBQ
O- CLK
O- CD CE
O- DATA
I- WRQ
O- MVR+
O- MVR-
I-HOLD
RESET
O- P-ON
O- MUTE
AVSS
O- K SCAN
I- MS
I- CD SW
I- DISH
O-DISH FWD
O-DISH REV
VDD
O- MOT
O-SOL1
O-SOL2
IC
I- RMC
I- SENS/ST
I- TUNE/IFC
O- REC SEL
O- HSP
O-M-STB
F-STB
I-MIC
I-KEY0
I-KEY1
I-KEY2
AVDD
AVREF
TH.BASE
NC
VSS
X1
X2
C-SHIFT
O-CD LED
O-PLL CE
O-DATA
O-CLK
V-LOAD
R207 220k
C201
C253 220/10
KEY0 KEY1 KEY2
TM.BASE
C203 180p
C204 18p
R204 1k
C205 22p
PLL CE
DATA
CLK
L201 COIL 4.19M
R209 10k
R208 10k
R205 10k
R206 10k
CLK
DATA
P-ON
R201 10k
R202 10k
R203 10k
D601 1N4148 M
R653 220k
R652 10k
D602 1N4148 M
R655 1k
LED401-404
SLP9118C 51S X4
LED411-418
SLP738F 81S X8
Q405 KTA1266 GR
POWER SW
R423 22k
R424 10k
C452 0.1
R654 15k
C653 0.22/50
R656 470k
C654 0.1
LED431-434
SLZ738A 24S X4
LED435-436
SLZ936C 30S X2
C651 1/50
MUTE
DSP CE
GEQ B
GEQ A
R717 3.9k
R715 10k
R718 68k
D701 1N4148 M
R716 39k
D703 1N4148 M
D702 1N4148 M
8.2k
LED441～445
LED. SEL1250M
DOLBY PROLOGIC
R441 560
R442 1k
R443 1k
R444 1k
LED441 LED445 ON/OFF
LED442 NORMAL
LED443 WIDE
LED444 PHANTOM
Q401-Q404
DTA124ES X4
FUNCTION LED SW
LED401, 411, 412
TAPE/DECK 1/2
LED402, 413, 414
TUNER/BAND
LED403, 415, 416
VIDEO/AUX
LED404, 417, 418
CD
R402 560
R404 560
R406 560
R408 560
TAPE Q401
TUNER Q402
AUX Q403
CD Q404
R401 330
R403 330
R405 330
R407 330
LED401 LED412 LED411
LED402 LED414 LED413
LED403 LED416 LED415
LED404 LED418 LED417
R409 1k
R410 1k
R411 1k
R412 1k
R413 1k
R414 1k
LED421-426
SEL1550CM TP8
X6
LED421 LED422 LED423 LED424 LED425 LED426
FF REW REV FWD STOP PAUSE
LED DRIVER
LED431 LED433 LED432 LED435 LED434 LED436
R415 330
R416 330
Q406 KTA1266 GR
R425 47k
R426 33k
LED431 ～ 436
DECK LIGHT
C401 0.022
R418 100k
R419 68k
R420 10k
STB DATA CLK
ON/OFF NORMAL WIDE PHANTOM
STB VCC DATA OE CLK MVR- ON/OFF MVR+ NORMAL WIDE PHANTOM Q'S VSS QS
IC401 ～ 403
SHIFT REGISTER
R422 220k
IC403 BU4094 BCF
11.83
TAPE TUNER AUX CD
STB VCC DATA OE CLK TB B TAPE TB A TUNER GEQ B AUX GEQ A CD Q'S VSS QS
TB B TB A GEQ B GEQ A
R421 220k
IC402 BU4094 BCF
R417 100
FF REW REV FWD
STB VCC DATA OE CLK R/P FF ON/OFF REW PAUSE REV STOP FWD Q'S VSS QS
IC401 BU4094 BCF
R133 82k
R134 82k
R135 470k
R136 82k
R140 100k
O-CLK
O-CD CE
O-DAT
WRQ
CD LE
SUBQ
CD SW
CL
OP
FW
RE
DIS
MVR+
MVR-
12.0
R753 10
R752 8.2
R751 10
Q701～704
MOTOR VR DRIVER
Q701 2SD655
Q702 2SD655
R755 3.9k
R756 3.9k
R762 4.7k
Q703 2SA952
Q704 2SA952
R761 4.7k
R757 220
R758 220
C508 100/16
SOL1
SOL2
MOT
R531 2.2k
R533 2.2k
R535 1.2k
R532 680
R534 680
R536 390
Q501 2SA952K
Q502 2SA952K
Q503 2SA1296 GR
SOL1 DRIVER
SOL2 DRIVER
MOTOR DRIVER
D531 1SS131
D532 1SS131
MOTOR
R537 47k
R538 47k
R539 47k
R529 47k
SOL2
SOL1
MOTOR
R540 47k
R541 47k
R542 47k
2CST RENB 2CAM 1AUTO 2AUTO 2LH 1LH 1CAM 1CST RENA
R543 4.7k
CON502
CON501
2CST RENB 2CAM SOL2 C1 1AUTO SOL1 HSP C2 2AUTO MOTOR 2LH 1LH 1CAM 1CST RENA
SFR1
TAPE SPEED ADJ
SFR1 3.3K
R2 3.9K
R3 8.2K
R1 100K
2SA933 S RS
M
DECK MOTOR
IC1, 2
DN6851
H DECK C.B
2ZM-3MK2
TAPE TRANSPORT
MOTOR H-SPEED SW
SIGNAL:
PB
CLK DSP CE DATA NC NC NC
CON702
C MVR C.B
CON704

DIODE MATRIX

NTSC /PAL	TU-1	TU-2	BAND	STEP
×	×	×	FM/AM	10K
×	×	○	FM/MW/SW	9K
×	○	×	FM/MW/LW	9K
×	○	○	FM1/FM2/ MW/LW	9K
○	×	×	FM/AM	10K
○	×	○	FM/AM	9K
○	○	×	FM/AM (ST)	9K
○	○	○	RESERVE	

※

	U		HE		EZK
D320 TU-1					○
D321 TU-2			○		
D322 NTSC/PAL	○				
D323 K-CON					
D324 DOLBY					○
D325			○		

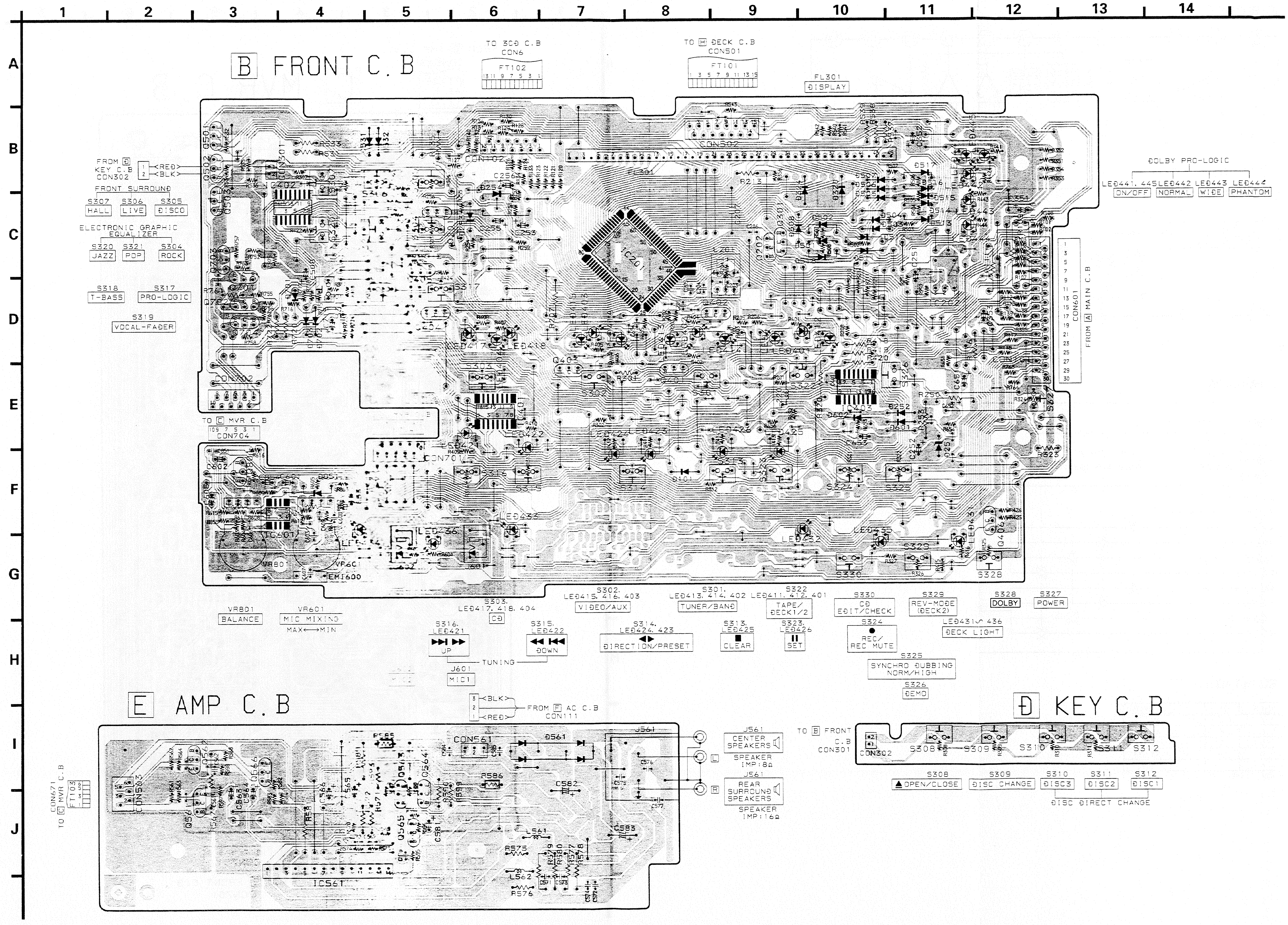

DIODE MATRIX
IC201
μPD78045BGF-017
MICROCOMPUTER
IC202
SPS 442 1
REMOTE UNIT
Q201 KTC3198 GR
D253 UZ4.7BSA
D252 1N4148M
D254 1N4148 M
RESET
SURR MUTE
Q202 DTC144 ES
DECK PROTECTOR
5.93
C207 0.1
R213 10
C206 470p
R212 10k
R211 10k
R210 10k
R209 10k
R208 10k
C253 220/10
L201 COIL 4.19M
C205 22p
D601 1N4148 M
D602 1N4148 M
R653 220k
Q405 KTA1266 GR
POWER SW
LED401-404
LED411-418 SLP738F 81S X8
LED421-426 SEL1550CM TP8 X6
LED431-434 SLZ738A 24S X4
LED435-436 SLZ936C 30S X2
LED DRIVER
Q406 KTA1266 GR
LED431 ~ 436 DECK LIGHT
TUNER Q402
AUX Q403
CD Q404
FF REW REV FWD STOP PAUSE
IC402 BU4094 BCF
IC401 BU4094 BCF
11.83
R417 100
CON102
CLK
CD CE
DATA
WRQ
CD LED
NC
SUBQ
CD SW
CLS
OPN
DISH FWD
DISH REV
DISH
TO 3CD C.B CON6
CON502
CON501
SFR1 TAPE SPEED ADJ
DECK MOTOR
R1 100K 2SA933 S RS
MOTOR H-SPEED SW
IC1, 2 DN6851
DECK C.B
2ZM-3MK2
TAPE TRANSPORT
SIGNAL:
PB

DIODE MATRIX

NTSC/PAL	TU-1	TU-2	BAND	STEP
×	×	×	FM/AM	10K
×	×	○	FM/MW/SW	9K
×	○	×	FM/MW/LW	9K
×	○	○	FM1/FM2/ MW/LW	9K
○	×	×	FM/AM	10K
○	×	○	FM/AM	9K
○	○	×	FM/AM (ST)	9K
○	○	○	RESERVE	

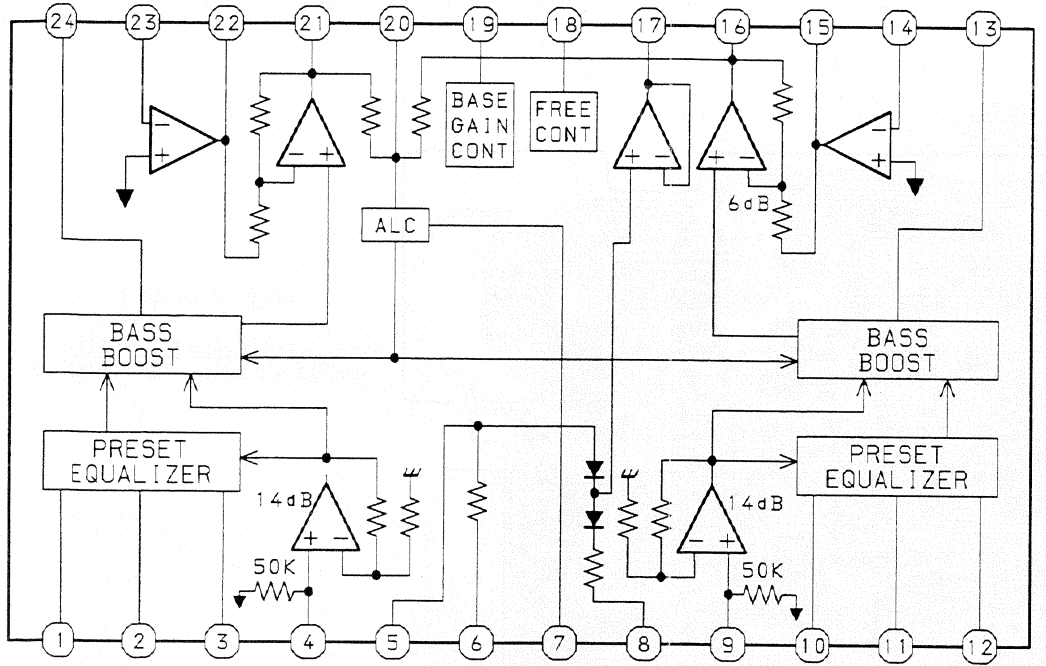
※

		U		HE		EZK
D320	TU-1					○
D321	TU-2			○		
D322	NTSC/PAL	○				
D323	K-CON					
D324	DOLBY					○
D325				○		

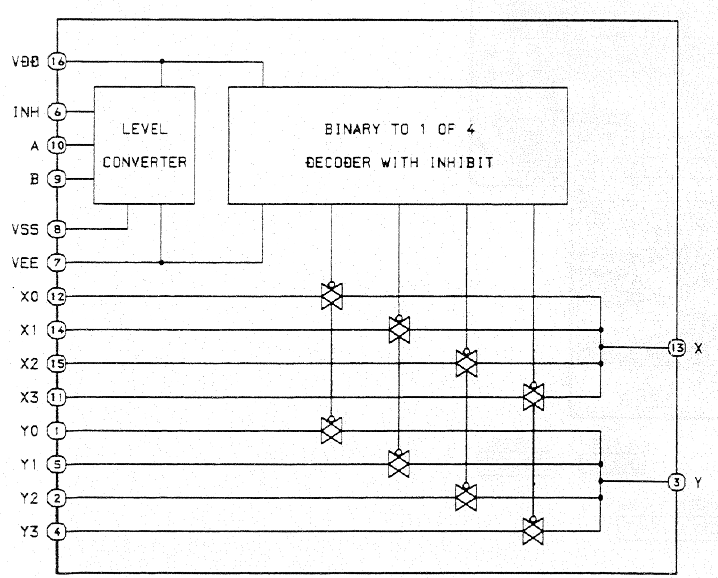

1
2
3
4
5
6
7
8
9
10
11
12
13
14
A
B
C
D
E
F
G
H
I
J
B FRONT C.B
TO 3CD C.B CON6
FT102
13 11 9 7 5 3 1
TO H DECK C.B CON501
FT101
1 3 5 7 9 11 13 15
FL301
DISPLAY
FROM D KEY C.B CON302
1 <RED>
2 <BLK>
FRONT SURROUND
S307 HALL
S306 LIVE
S305 DISCO
ELECTRONIC GRAPHIC EQUALIZER
S320 JAZZ
S321 POP
S304 ROCK
S318 T-BASS
S317 PRO-LOGIC
S319 VOCAL-FADER
DOLBY PRO-LOGIC
LED441, 445 ON/OFF
LED442 NORMAL
LED443 WIDE
LED444 PHANTOM
CON601 FROM A MAIN C.B
1 3 5 7 9 11 13 15 17 19 21 23 25 27 29 30
IC201
IC402
IC403
IC601
CON502
CON102
CON702
CON701
TO C MVR C.B
10 9 7 5 3 1
CON704
VR801
EMI600
VR801 BALANCE
VR601 MIC MIXING
MAX←→MIN
S303, LED417, 418, 404
CD
S302, LED415, 416, 403
VIDEO/AUX
S301, LED413, 414, 402
TUNER/BAND
S322 LED411, 412, 401
TAPE/DECK1/2
S330 CD EDIT/CHECK
S329 REV-MODE (DECK2)
S328 DOLBY
S327 POWER
S316, LED421
▶▶I ▶▶ UP
S315, LED422
◀◀ I◀◀ DOWN
TUNING
J601 MIC1
S314, LED424, 423
◀▶ DIRECTION/PRESET
S313, LED425
■ CLEAR
S323, LED426
II SET
S324
● REC/REC MUTE
LED431～436
DECK LIGHT
S325
SYNCHRO DUBBING NORM/HIGH
S326 DEMO
E AMP C.B
3 <BLK>
2
1 <RED>
FROM F AC C.B CON111
CON671 TO C MVR C.B
FT103
CON503
CON561
D561
J561
IC561
J561 CENTER SPEAKERS
SPEAKER IMP:8Ω
J561 REAR SURROUND SPEAKERS
SPEAKER IMP:16Ω
L
R
D KEY C.B
TO B FRONT C.B CON301
CON302
S308
S309
S310
S311
S312
S308 ▲OPEN/CLOSE
S309 DISC CHANGE
S310 DISC3
S311 DISC2
S312 DISC1
DISC DIRECT CHANGE

IC BLOCK DIAGRAM – 3

IC, BA3842F


24
23
22
21
20
19
18
17
16
15
14
13
BASE GAIN CONT
FREE CONT
6dB
ALC
BASS BOOST
BASS BOOST
PRESET EQUALIZER
PRESET EQUALIZER
14dB
14dB
50K
50K
1
2
3
4
5
6
7
8
9
10
11
12

IC, BU4052BC

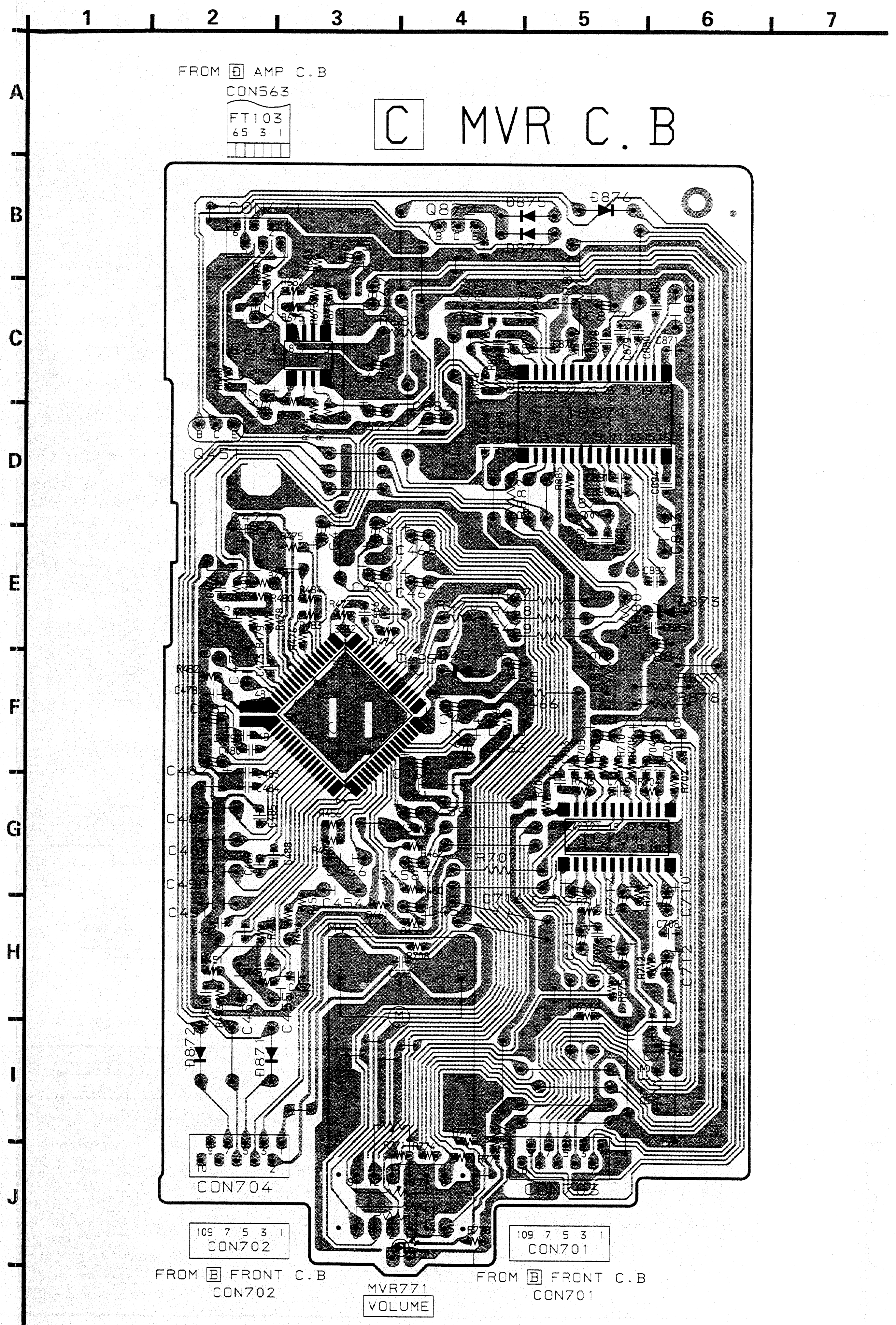

VDD 16
INH 6
A 10
B 9
VSS 8
VEE 7
X0 12
X1 14
X2 15
X3 11
Y0 1
Y1 5
Y2 2
Y3 4
LEVEL CONVERTER
BINARY TO 1 OF 4 DECODER WITH INHIBIT
13 X
3 Y

TRUTH TABLE

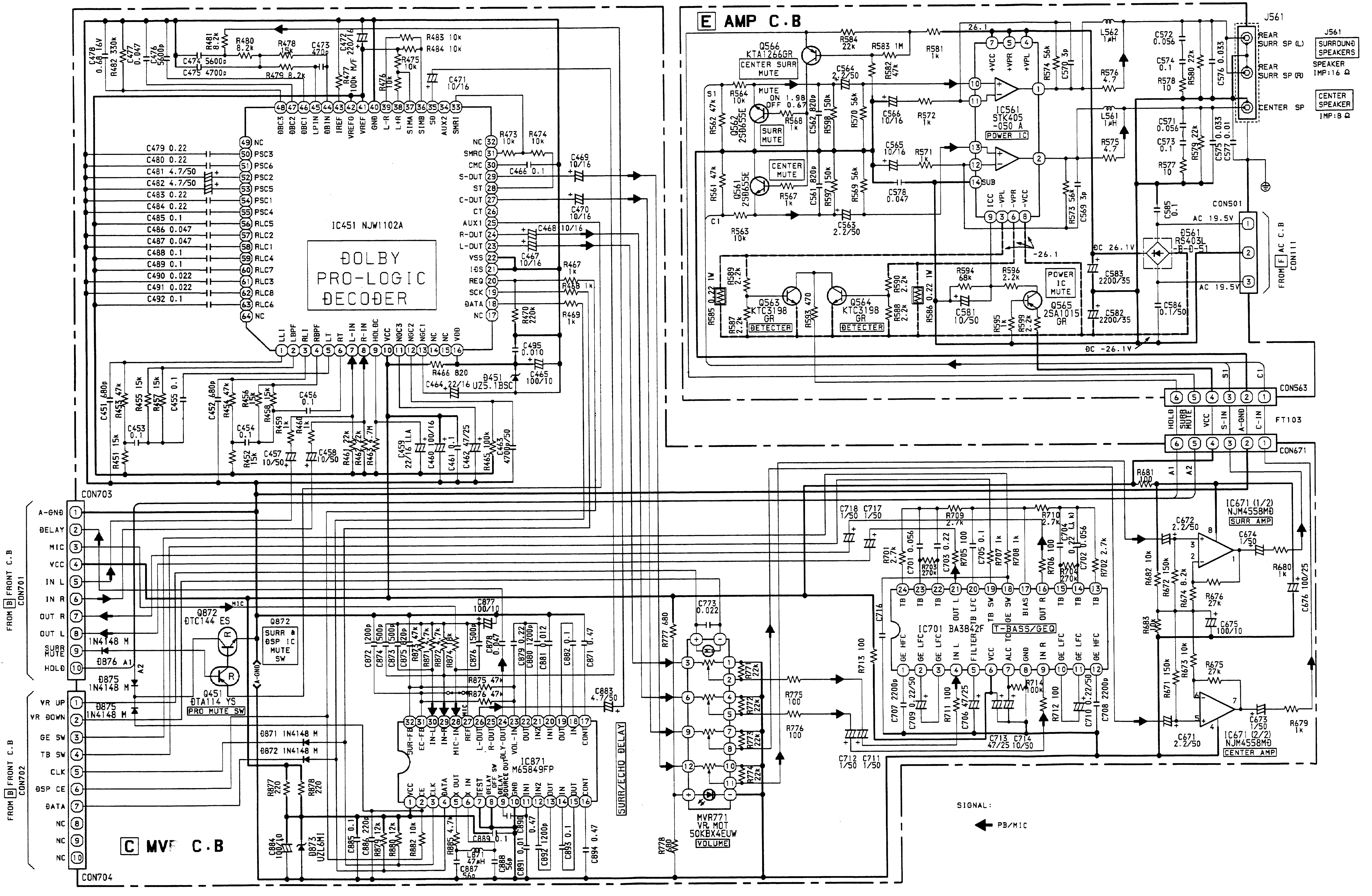
INHIBIT	A	B	ON SWITCH
L	L	L	X0 Y0
L	H	L	X1 Y1
L	L	H	X2 Y2
L	H	H	X3 Y3
H	X	X	NONE

X : DON'T CARE.

WIRING – 3 (MVR)

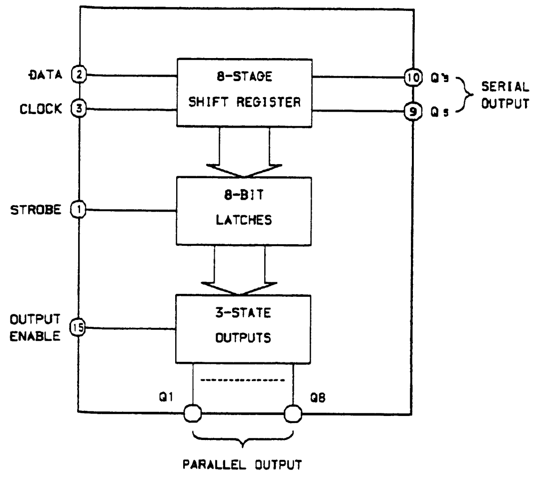

1
2
3
4
5
6
7
A
B
C
D
E
F
G
H
I
J
FROM D AMP C.B
CON563
FT103
6 5 3 1
C MVR C.B
Q871
D875
D876
D877
Q451
D873
R877
R878
C710
D872
D871
CON704
10
2
109 7 5 3 1
CON702
FROM B FRONT C.B
CON702
MVR771
VOLUME
109 7 5 3 1
CON701
FROM B FRONT C.B
CON701

SCHEMATIC DIAGRAM – 3 (MVR /AMP)


IC451 NJW1102A
DOLBY PRO-LOGIC DECODER
E AMP C·B
Q566 KTA1266GR
CENTER SURR MUTE
SURR MUTE
CENTER MUTE
Q562 2SD655E
Q561 2SD655E
IC561 STK405-050 A
POWER IC
Q563 KTC3198 GR
DETECTER
Q564 KTC3198 GR
DETECTER
POWER IC MUTE
Q565 2SA1015 GR
D561 RS403L -B-D-51
CON501
AC 19.5V
FROM F AC C.B CON111
J561
REAR SURR SP (L)
REAR SURR SP (R)
CENTER SP
SURROUND SPEAKERS
SPEAKER IMP:16 Ω
CENTER SPEAKER IMP:8 Ω
DC 26.1V
DC -26.1V
CON563
FT103
CON671
HOLD
SURR MUTE
VCC
S-IN
A-GND
C-IN
IC671 (1/2) NJM4558MD
SURR AMP
IC671 (2/2) NJM4558MD
CENTER AMP
IC701 BA3842F
T-BASS/GEQ
CON703
CON704
FROM B FRONT C.B CON701
FROM B FRONT C.B CON702
A-GND
DELAY
MIC
VCC
IN L
IN R
OUT R
OUT L
SURR MUTE
HOLD
VR UP
VR DOWN
GE SW
TB SW
CLK
DSP CE
DATA
NC
Q872 DTC144 ES
Q872 SURR & DSP IC MUTE SW
Q451 DTA114 YS
PRO MUTE SW
D876
D875 1N4148 M
D871 1N4148 M
D872 1N4148 M
D873 UZL6H1
IC871 M65849FP
SURR/ECHO DELAY
MVR771 VR MOT 50KBX4EUW
VOLUME
C MVR C·B
SIGNAL:
PB/MIC

IC BLOCK DIAGRAM – 4

IC, BU4094BC/BCF


DATA 2
CLOCK 3
8-STAGE SHIFT REGISTER
10 Qs
9 Q's
SERIAL OUTPUT
STROBE 1
8-BIT LATCHES
OUTPUT ENABLE 15
3-STATE OUTPUTS
Q1
Q8
PARALLEL OUTPUT

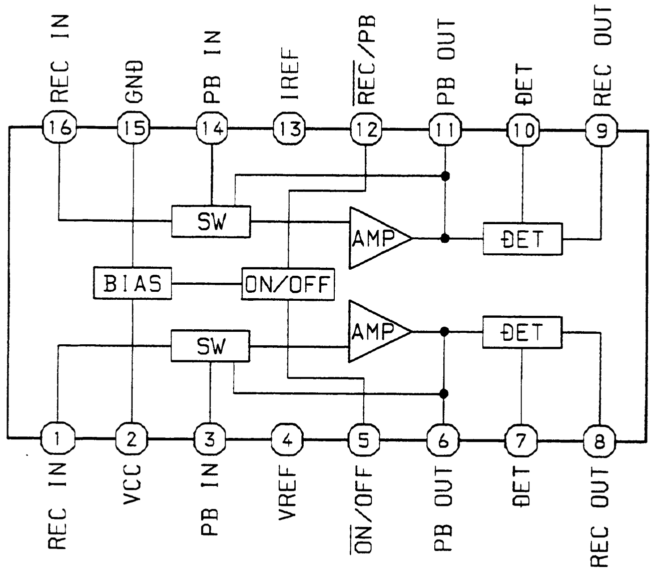
TRUTH TABLE

CLOCK	OUTPUT ENABLE	STROBE	DATA	PARALLEL OUTPUTS		SERIAL OUTPUTS	
				Q1	Qn	Qs	Q's
↑	L	X	X	Z	Z	Q7	NO Chg.
↓	L	X	X	Z	Z	No Chg.	Qs
↑	H	L	X	No Chg.	No Chg.	Q7	No Chg.
↑	H	H	L	L	Qn-1	Q7	No Chg.
↑	H	H	H	H	Qn-1	Q7	No Chg.
↓	H	X	X	No Chg.	No Chg.	No Chg.	Qs

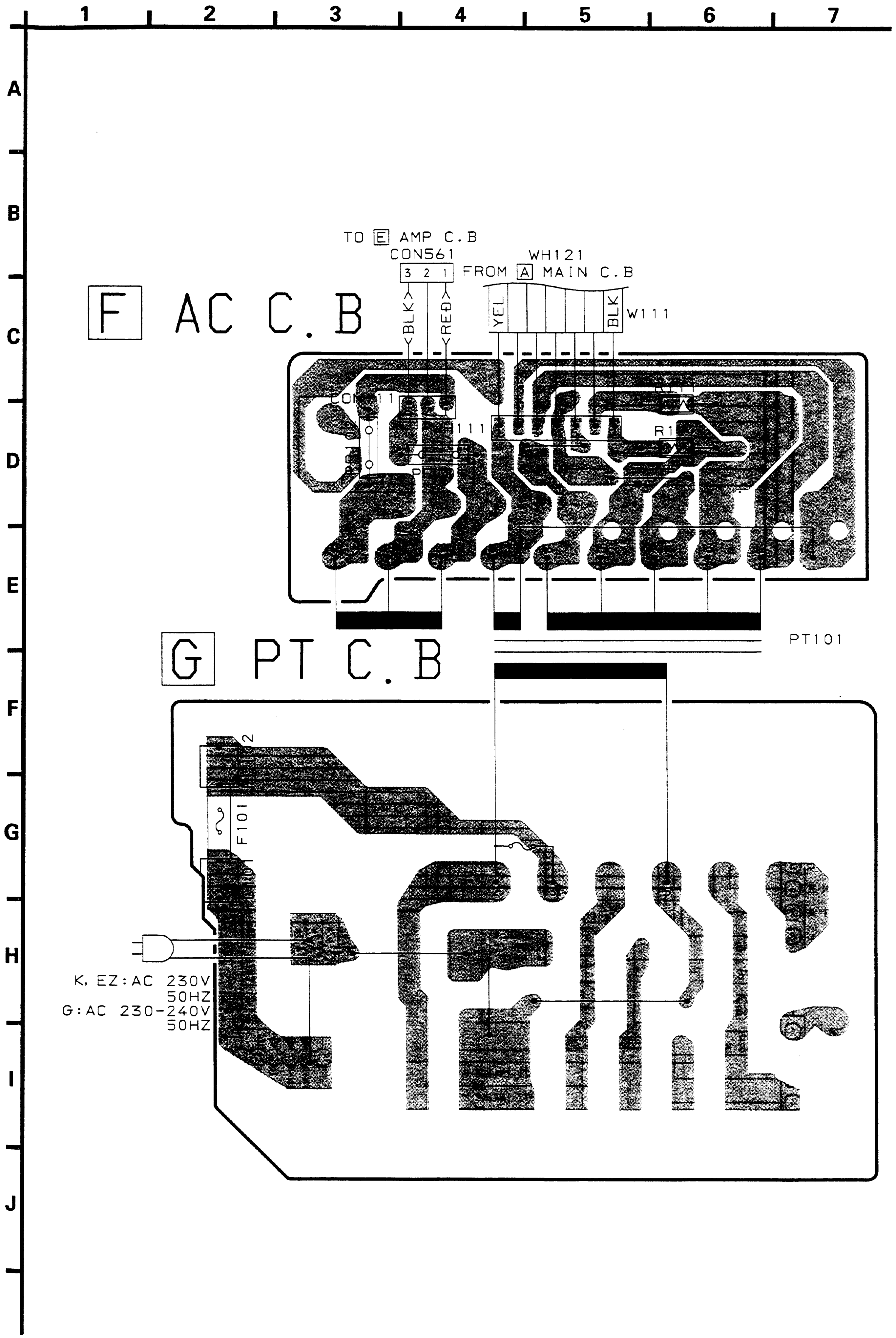
Z=High Impedance

X=Don't Care

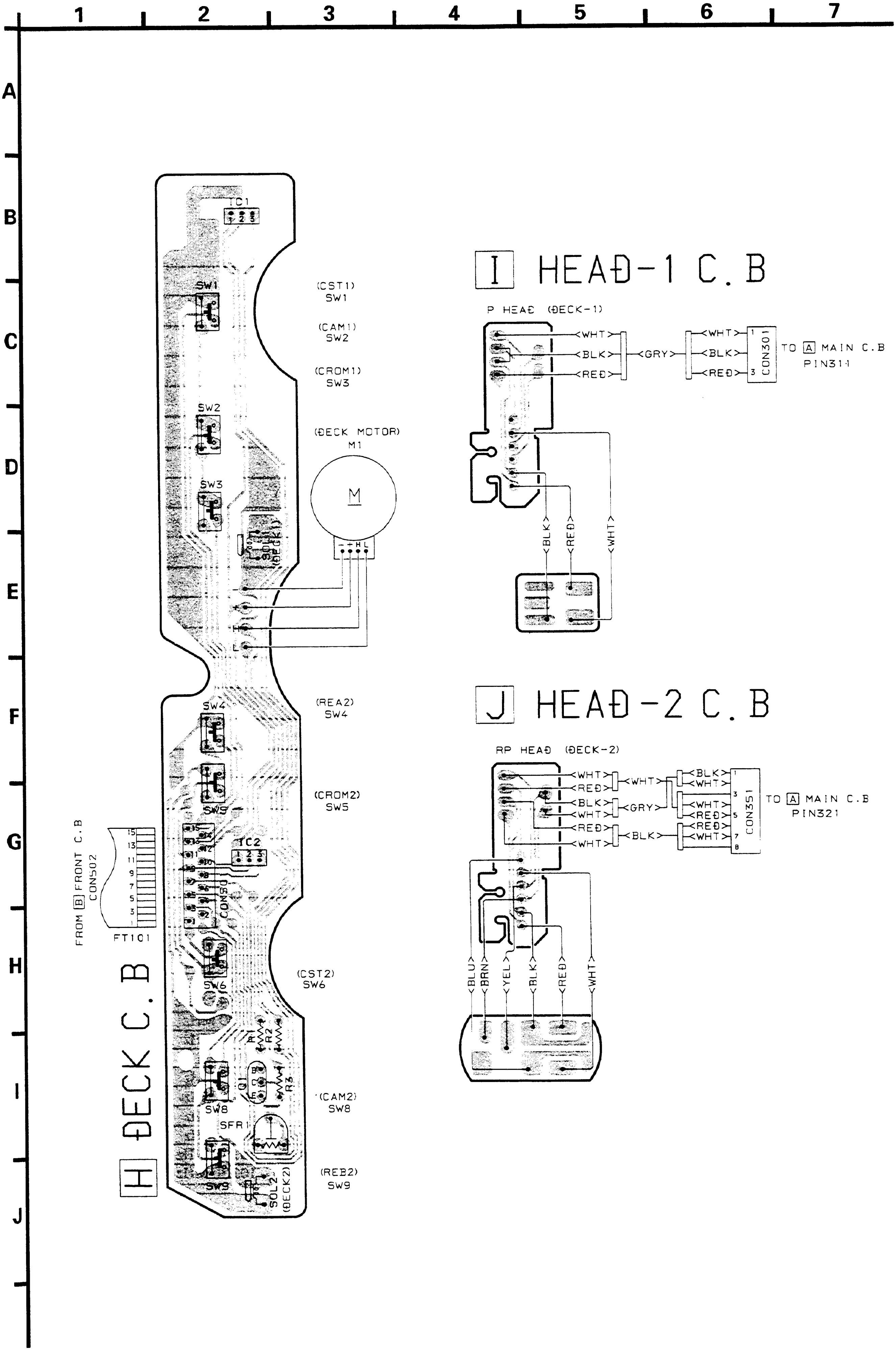
IC, HA12134A


REC IN 16
GND 15
PB IN 14
IREF 13
REC/PB 12
PB OUT 11
DET 10
REC OUT 9
SW
AMP
DET
BIAS
ON/OFF
SW
AMP
DET
1 REC IN
2 VCC
3 PB IN
4 VREF
5 ON/OFF
6 PB OUT
7 DET
8 REC OUT

WIRING – 4 (PT)


1
2
3
4
5
6
7
A
B
C
D
E
F
G
H
I
J
TO E AMP C.B
CON561
3 2 1
WH121
FROM A MAIN C.B
F AC C.B
<BLK>
<RED>
YEL
BLK
W111
CON111
R1
PT101
G PT C.B
F101
K, EZ:AC 230V 50HZ
G:AC 230-240V 50HZ

WIRING - 5 (DECK)



1
2
3
4
5
6
7
A
B
C
D
E
F
G
H
I
J
H DECK C.B
I HEAD-1 C.B
J HEAD-2 C.B
IC1
1 2 3
SW1
(CST1) SW1
(CAM1) SW2
(CROM1) SW3
SW2
SW3
(DECK MOTOR) M1
M
- + H L
SOL1 (DECK1)
H
L
SW4
(REA2) SW4
SW5
(CROM2) SW5
IC2
1 2 3
CON501
15
13
11
9
7
5
3
1
FROM B FRONT C.B CON502
FT101
SW6
(CST2) SW6
R1
R2
R3
Q1
E C B
SW8
(CAM2) SW8
SFR1
SW9
(REB2) SW9
SOL2 (DECK2)
P HEAD (DECK-1)
WHT
BLK
RED
GRY
CON301
1
3
TO A MAIN C.B PIN311
BLK
RED
WHT
RP HEAD (DECK-2)
WHT
RED
BLK
WHT
RED
WHT
WHT
GRY
BLK
BLK
WHT
WHT
RED
RED
WHT
CON351
1
3
5
7
8
TO A MAIN C.B PIN321
BLU
BRN
YEL
BLK
RED
WHT

IC DESCRIPTION

IC, µPD78045BGF-017

<table>
<tr><th>Pin No.</th><th>Pin Name</th><th>I/O</th><th>Description</th></tr>
<tr><td>1~7</td><td>G7 ~G1</td><td>O</td><td>FL grid output. (G1~G7)</td></tr>
<tr><td>8</td><td>VDD</td><td>-</td><td>Power supply terminal. (+5V)</td></tr>
<tr><td>9</td><td>I-SUBQ</td><td rowspan="5">I/O</td><td rowspan="5">CD IC control input/output.</td></tr>
<tr><td>10</td><td>O-CLK</td></tr>
<tr><td>11</td><td>O-CD·CE</td></tr>
<tr><td>12</td><td>O-DATA</td></tr>
<tr><td>13</td><td>I-WRQ</td></tr>
<tr><td>14</td><td>$\overline{\text{I-SURR MUTE}}$</td><td>I</td><td>"L" input DSP, PROLOGIC off.</td></tr>
<tr><td>15</td><td>O-DSP CE</td><td>O</td><td>DSP data latch strobe output.</td></tr>
<tr><td>16</td><td>$\overline{\text{I-HOLD}}$</td><td>I</td><td>Power failure detected input. (Low when Hold)</td></tr>
<tr><td>17</td><td>$\overline{\text{RESET}}$</td><td>I</td><td>System reset input.</td></tr>
<tr><td>18</td><td>$\overline{\text{O-POWER}}$</td><td>O</td><td>System power supply $\overline{\text{ON}}$/OFF output.</td></tr>
<tr><td>19</td><td>O-MUTE</td><td>O</td><td>System mute ON/$\overline{\text{OFF}}$ output.</td></tr>
<tr><td>20</td><td>AVSS</td><td>-</td><td>GND.</td></tr>
<tr><td>21</td><td>$\overline{\text{O-KSCAN}}$</td><td>O</td><td>Segment input permitted output. (Active low)</td></tr>
<tr><td>22</td><td>I-MS</td><td>I</td><td>DECK MS detected A/D input.</td></tr>
<tr><td>23</td><td>I-CD SW</td><td>I</td><td>CD Mechanical switch AD input.</td></tr>
<tr><td>24</td><td>I-DISH</td><td>I</td><td>CD turntable photo sensor A/D input.</td></tr>
<tr><td>25</td><td>I-MIC</td><td>I</td><td>Mic level A/D input for auto vocal fader.</td></tr>
<tr><td>26</td><td>I-KEY0</td><td>I</td><td>KEY0 A/D input.</td></tr>
<tr><td>27</td><td>I-KEY 1</td><td>I</td><td>KEY1 A/D input.</td></tr>
<tr><td>28</td><td>I-KEY 2</td><td>I</td><td>KEY2 A/D input.</td></tr>
<tr><td>29</td><td>AVDD</td><td>-</td><td>Power supply terminal.</td></tr>
<tr><td>30</td><td>AVREF</td><td>I</td><td>Reference voltage. (+5V)</td></tr>
<tr><td>31</td><td>I-TMBASE</td><td>I</td><td>Input a reference clock signal (8Hz) to the clock.</td></tr>
<tr><td>32</td><td>NC</td><td>-</td><td>-</td></tr>
<tr><td>33</td><td>VSS</td><td>-</td><td>GND.</td></tr>
<tr><td>34</td><td>X1</td><td>I</td><td>4.19MHz clock oscillator input.</td></tr>
<tr><td>35</td><td>X2</td><td>I</td><td>4.19MHz clock oscillator input.</td></tr>
<tr><td>36</td><td>$\overline{\text{O-C·SHIFT}}$</td><td>O</td><td>Micro clock shift output.
LC oscillator, "L" clock shift.
<table>
<tr><th></th><th>SHIFT FREQUENCY</th><th>REQUIRED STEP</th></tr>
<tr><td rowspan="3">SW</td><td>8.337 ~ 8.423 MHz</td><td rowspan="3">1 kHz</td></tr>
<tr><td>12.506 ~ 12.634 MHz</td></tr>
<tr><td>16.675 ~ 16.845 MHz</td></tr>
<tr><td rowspan="2">FM
(OIRT)</td><td>66.70 ~ 67.40 MHz</td><td rowspan="2">10 kHz</td></tr>
<tr><td>70.85 ~ 71.60 MHz</td></tr>
<tr><td rowspan="7">FM</td><td>79.20 ~ 80.05 MHz</td><td rowspan="7">50 kHz</td></tr>
<tr><td>83.35 ~ 84.25 MHz</td></tr>
<tr><td>87.50 ~ 88.45 MHz</td></tr>
<tr><td>91.70 ~ 92.65 MHz</td></tr>
<tr><td>95.85 ~ 96.90 MHz</td></tr>
<tr><td>100.05 ~ 101.10 MHz</td></tr>
<tr><td>104.20 ~ 105.30 MHz</td></tr>
</table>
</td></tr>
<tr><td>37</td><td>O-CD LED</td><td>O</td><td>CD flash window LED ON/$\overline{\text{OFF}}$ output.</td></tr>
<tr><td>38</td><td>O-PLL·CE</td><td>O</td><td>PLL IC chip enable output.</td></tr>
<tr><td>39</td><td>O-DATA</td><td>O</td><td>Main and front PLL shift register data output.</td></tr>
</table>

<table>
<tr><th>Pin No.</th><th>Pin Name</th><th>I/O</th><th>Description</th></tr>
<tr><td>40</td><td>O-CLK</td><td>O</td><td>Main and front PLL shift register clock output.</td></tr>
<tr><td>41</td><td>O-FSTB</td><td>O</td><td>Front shift register data latch strobe output.</td></tr>
<tr><td>42</td><td>O-MSTB</td><td>O</td><td>Main shift register data latch strobe output.</td></tr>
<tr><td>43</td><td>O-HSP</td><td>O</td><td>Deck motor high speed ON/$\overline{\text{OFF}}$ output.</td></tr>
<tr><td>44</td><td>O-REC SEL</td><td>O</td><td>Deck recording input switch.(HiZ-RMT, H-MIX, L-TAPE)
<table>
<tr><td>"HiZ"
(MUTE)</td><td>"H"
(MIX)</td><td>"L"
(TAPE)</td><td>Dolby On : "L"(TAPE)
Dolby Off : "H" (MIX)</td></tr>
<tr><td>REC
muting</td><td>Manual
dubbing</td><td>Synchronize
dubbing</td><td>Tuner/Aux/CD Recording</td></tr>
</table></td></tr>
<tr><td>45</td><td>$\overline{\text{I-TUNE/IFC}}$</td><td>I</td><td>SD detected input or serial data input of IF count to and from Tuner.</td></tr>
<tr><td>46</td><td>$\overline{\text{I-SENS ST}}$</td><td>I</td><td>Stereo detected input to and from Tuner. (Active low)</td></tr>
<tr><td>47</td><td>$\overline{\text{I-RMC}}$</td><td>I</td><td>System remote controller input. (Active low)</td></tr>
<tr><td>48</td><td>IC</td><td>-</td><td>Internal connection. (connected to GND)</td></tr>
<tr><td>49</td><td>$\overline{\text{O-SOL2}}$</td><td>O</td><td>DECK 2 solenoid $\overline{\text{ON}}$/OFF output.</td></tr>
<tr><td>50</td><td>$\overline{\text{O-SOL1}}$</td><td>O</td><td>DECK 1 solenoid $\overline{\text{ON}}$/OFF output.</td></tr>
<tr><td>51</td><td>$\overline{\text{O-MOTOR}}$</td><td>O</td><td>DECK motor $\overline{\text{ON}}$/OFF output.</td></tr>
<tr><td>52</td><td>VDD</td><td>-</td><td>Power supply terminal. (+5V)</td></tr>
<tr><td>53</td><td>O-DISH RVS</td><td>O</td><td>3 disc table slet rotation output.</td></tr>
<tr><td>54</td><td>O-DISH FWD</td><td>O</td><td>3 disc table slet rotation output.</td></tr>
<tr><td>55</td><td>P1 /$\overline{\text{SCTI}}$</td><td>O</td><td>FL segment output. (P1, DECK 1 cassette detection switch input)</td></tr>
<tr><td>56</td><td>P2/$\overline{\text{CAM1}}$</td><td>O</td><td>FL segment output. (P2, DECK 1 cam switch input)</td></tr>
<tr><td>57</td><td>P3/$\overline{\text{AUTO1}}$</td><td>O</td><td>FL segment output. (P3, DECK 1 auto stop input)</td></tr>
<tr><td>58</td><td>P4/$\overline{\text{AUTO2}}$</td><td>O</td><td>FL segment output. (P4, DECK 2 auto stop input)</td></tr>
<tr><td>59</td><td>P5/$\overline{\text{CAM2}}$</td><td>O</td><td>FL segment output. (P5, DECK 2 cam switch input)</td></tr>
<tr><td>60</td><td>P6/$\overline{\text{REB}}$</td><td>O</td><td>FL segment output. (P6, DECK 2 B side recording permission switch input)</td></tr>
<tr><td>61</td><td>P7/$\overline{\text{CST2}}$</td><td>O</td><td>FL segment output. (P7, DECK 2 cassette detection switch input)</td></tr>
<tr><td>62</td><td>P8/$\overline{\text{REA}}$</td><td>O</td><td>FL segment output. (P8, DECK 2 A side recording permission switch input)</td></tr>
<tr><td>63</td><td>P9/TU1</td><td>O</td><td>FL segment output. (P9, Diode (TU1) input)</td></tr>
<tr><td>64</td><td>P10/TU2</td><td>O</td><td>FL segment output. (P10, Diode (TU2) input)</td></tr>
<tr><td>65</td><td>P11/NTSC/$\overline{\text{PAL}}$</td><td>O</td><td>FL segment output. (P11, NTSC initial diode input)</td></tr>
<tr><td>66</td><td>P12/KEYCON</td><td>O</td><td>FL segment output. (P12, Key con diode input)</td></tr>
<tr><td>67</td><td>P13/DOLBY</td><td>O</td><td>FL segment output. (P13, Dolby diode input)</td></tr>
<tr><td>68</td><td>P14/DSP</td><td>O</td><td>FL segment output. (P14, DSP diode input)</td></tr>
<tr><td>69~77</td><td>P15~22</td><td>O</td><td>FL segment output. (P15~22)</td></tr>
<tr><td>78</td><td>O-CLOSE</td><td>O</td><td>CD tray close output.</td></tr>
<tr><td>79</td><td>O-OPEN</td><td>O</td><td>CD tray open output.</td></tr>
<tr><td>80</td><td>G8</td><td>O</td><td>FL grid output. (G8)</td></tr>
</table>

IC, LC72131D

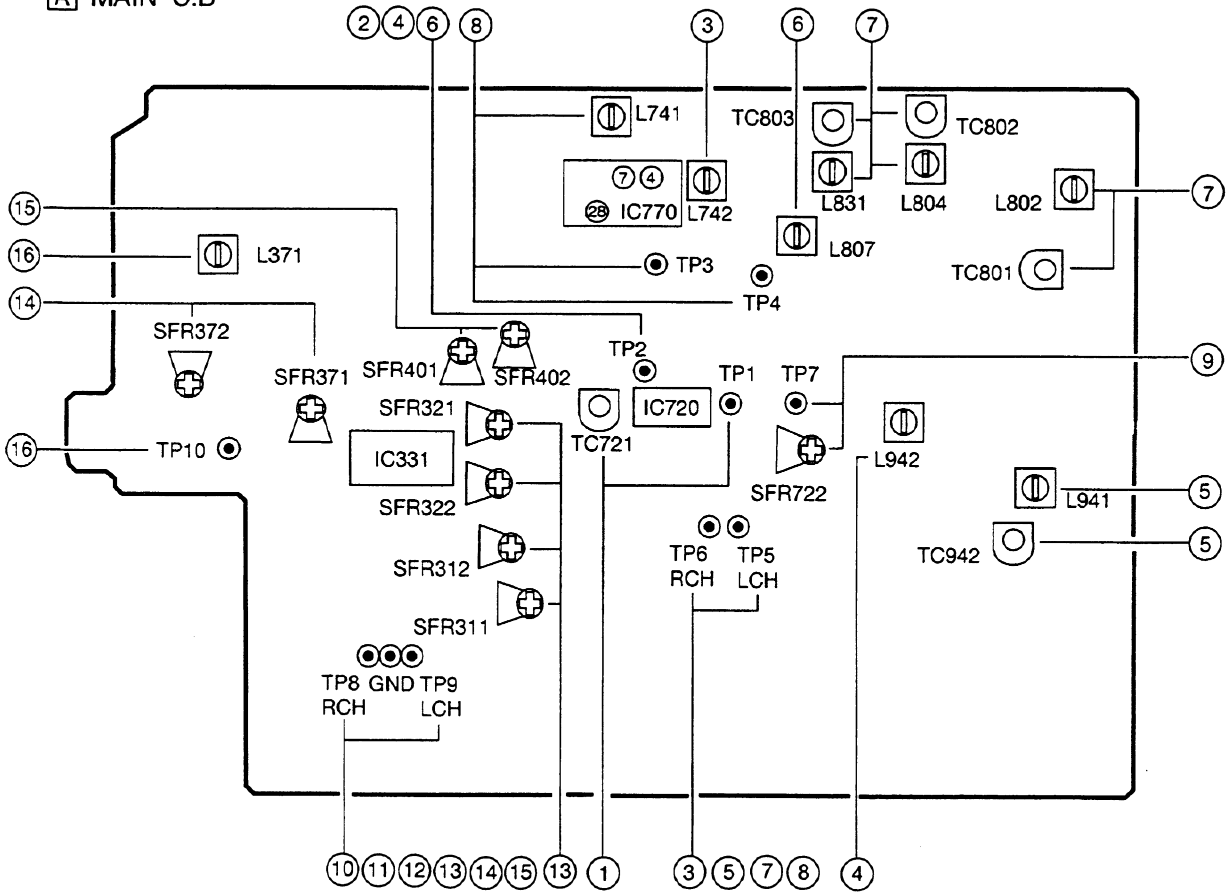
<table>
<tr><th>Pin No.</th><th>Pin Name</th><th>I/O</th><th>Description</th></tr>
<tr><td>1</td><td>XIN</td><td rowspan="2">–</td><td rowspan="2">A crystal oscillator (7.2MHz) is connected between these pins.</td></tr>
<tr><td>22</td><td>XOUT</td></tr>
<tr><td>2</td><td>NC</td><td>–</td><td>Not used.</td></tr>
<tr><td>3</td><td>CE</td><td>I</td><td>To enable the IC. Active "H".</td></tr>
<tr><td>4</td><td>DI</td><td>I</td><td>Digital data input from CPU (LC866432V-5A45) when relevant key is operated. Active "H".</td></tr>
<tr><td>5</td><td>CLK</td><td>I</td><td>To clock in the data DI.</td></tr>
<tr><td>6</td><td>DO</td><td>O</td><td>Digital data output to CPU (LC866432V-5A45).</td></tr>
<tr><td>7</td><td>TM-BASE</td><td>O</td><td>Outputs a reference clock signal (8Hz) for the clock.</td></tr>
<tr><td>8</td><td>$\overline{\text{MONO}}$ / BEAT</td><td>O</td><td>Outputs "H" when MONO / BEAT is switched.</td></tr>
<tr><td>9</td><td>$\overline{\text{FM}}$ / AM</td><td>O</td><td>Output "L" or "H" as follows:
<table>
<tr><th colspan="2">2 BAND</th><th colspan="3">3 BAND</th><th colspan="3">3 BAND</th></tr>
<tr><td>AM</td><td>FM</td><td>LW</td><td>MW</td><td>FM</td><td>MW</td><td>SW</td><td>FM</td></tr>
<tr><td>H</td><td>L</td><td>H</td><td>H</td><td>L</td><td>H</td><td>L</td><td>L</td></tr>
</table></td></tr>
<tr><td>10</td><td>$\overline{\text{MW}}$</td><td>O</td><td>Outputs "L" or "H" as follows:
<table>
<tr><th colspan="2">2 BAND</th><th colspan="3">3 BAND</th><th colspan="3">3 BAND</th></tr>
<tr><td>AM</td><td>FM</td><td>LW</td><td>MW</td><td>FM</td><td>MW</td><td>SW</td><td>FM</td></tr>
<tr><td>L</td><td>L</td><td>H</td><td>L</td><td>L</td><td>L</td><td>H</td><td>L</td></tr>
</table></td></tr>
<tr><td>11</td><td>IF-MUTE</td><td>O</td><td>To control internal counter.</td></tr>
<tr><td>12</td><td>IFIN</td><td>I</td><td>General purpose counter input.</td></tr>
<tr><td>13</td><td>$\overline{\text{TUNE}}$</td><td>I</td><td>Receives "L" when station is tuned.</td></tr>
<tr><td>14</td><td>NC</td><td>–</td><td>Not used.</td></tr>
<tr><td>15</td><td>A MIN</td><td>I</td><td>Receives the AM local oscillator frequency signal.</td></tr>
<tr><td>16</td><td>F MIN</td><td>I</td><td>Receives the FM local oscillator frequency signal.</td></tr>
<tr><td>17</td><td>VDD</td><td>–</td><td>Supply power to IC (+5V).</td></tr>
<tr><td>18</td><td>PD</td><td>O</td><td>PLL charge pump output.</td></tr>
<tr><td>19</td><td>AIN</td><td>I</td><td rowspan="2">The MOS transistor for PLL active low pass filter.</td></tr>
<tr><td>20</td><td>AOUT</td><td>O</td></tr>
<tr><td>21</td><td>VSS</td><td>–</td><td>Ground.</td></tr>
</table>

IC, NJW1102AFG1

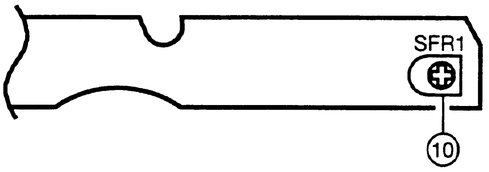
Pin No.	Pin Name	I/O	Description
1	LLI	I	Lch BPF in.
2	LBPF	O	Lch BPF feed back out.
3	RLI	I	Rch BPF in.
4	RBPF	O	Rch BPF feed back out.
5	LT	O	Lch selector #1 out.
6	RT	O	Rch selector #1 out·
7	LIN	I	Lch signal input.
8	RIN	I	Rch signal input.
9	HOLDC	I	Auto input balance control.
10	VCC	–	Power supply.
11~13	NGC 3~1	I	Noise sequencer control.
14,15	NC	–	Not connect.
16	VDD	–	Power supply.
17	NC	–	–
18	DATA	I	Serial data input.
19	SCK	I	Serial clock input.
20	REQ	I	Serial request (strobe) input.
21	IDS	I	IC select sw.
22	VSS	–	GND.
23	LOUT	O	Lch serial output.
24	ROUT	O	Rch serial output.
25	AUX1	O	AUX1 output (serial data change parallel output.
26	CT	O	Cch output (before trimmer).
27	C-OUT	O	Cch output (after trimmer).
28	ST	O	Sch output (before trimmer).
29	S-OUT	O	Sch output (after trimmer).
30	CMC	I	Center mode control.
31	SMRO	O	Sch amp (front L,R mix) output.
32	NC	–	–
33	SMRI	I	Sch amp (front L,R mix) input.
34	AUX2	O	AUX2 output (serial data change parallel output).
35	SD	O	Selector #2 out (to delay IC).
36	SIMBB	I	Selector #2 input B (L-R).
37	SIMBA	I	Selector #2 input A (L+R).
38	L+R	O	L+R ch output.
39	L-R	O	L-R ch output.
40	GND	–	Gnd.
41	VREF	I	VREF in.
42	VREFG	O	Vref out.
43	IREF	I	Iref in.
44	DBIBN	O	Output to modify dolby B IC (inclused NJW1102).
45	LPIN	I	From delay input.
46~48	DBC 1~3	I	Dolby B NR control.
49	NC	–	–
50~55	PSC 1~6	I	Dual time constant and threshold switches control.
56~63	RLC 1~8	I	Full wave rectifier and log difference amp control.
64	NC	–	–

ELECTRICAL ADJUSTMENT <TUNER / DECK>

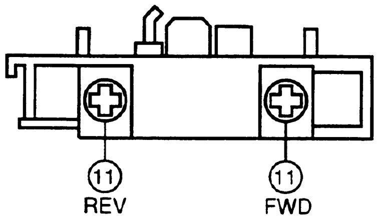
A MAIN C.B


②④⑥⑧
③
⑥
⑦
L741
TC803
TC802
⑦④
㉘ IC770
L742
L831
L804
L802
⑦
⑮
⑯
L371
L807
⑭
TP3
TP4
TC801
SFR372
SFR371
SFR401
SFR402
TP2
TP1
TP7
⑨
SFR321
IC720
⑯
TP10
IC331
TC721
L942
SFR322
SFR722
L941
⑤
SFR312
TP6
RCH
TP5
LCH
TC942
⑤
SFR311
TP8
GND
TP9
RCH
LCH
⑩⑪⑫⑬⑭⑮
⑬
①
③⑤⑦⑧
④

H DECK C.B



DECK–1 P, DECK–2 R / P / E HEAD



< TUNER SECTION >

1. Clock Frequency Adjustment
   Settings : • Test point : TP1
   • Adjustment location : TC721
   Method : Set to MW 1602kHz and adjust TC721 so that the test point becomes 2052kHz ± 0.01kHz.

2. MW VT Check
   Settings : • Test point : TP2 (VT)
   Method : Set to MW 1602kHz and check that the test point is 5.8V ± 1.0V.

3. AM IF Adjustment
   Settings : • Test point : TP-5, TP-6
   • Ajustment location : L742
   Method : Set to MW 999kHz and adjust L742 so that the test point becomes maximum.

4. LW VT Adjustment
   Settings : • Test point : TP2 (VT)
   • Ajustment location : L942
   Method : Set to LW 144kHz and adjust L942 so that the test point becomes 1.5V ± 0.05V.

5. LW Tracking Adjustment
   Settings : • Test point : TP-5, TP-6
   • Adjustment location :
   L941 .... 144kHz
   TC942 .... 290kHz
   Method : Set up TC942 to center before adjustment. The level at 144kHz is adjusted to MAX by L941. Then the level at 290kHz is adjusted to MAX by TC942.

6. FM VT Adjustment
   Settings : • Test point : TP2 (VT)
   • Adjustment location : L807
   Method : Set to FM 108MHz and adjust L807 so that test point is 8.0V ± 0.05V. Then set to FM 87.5MHz and adjust L807 so that test point is more than 1.5V.

7. FM Tracking Adjustment
Settings : • Test point : TP5, TP6
• Adjustment location :
L802,L804,L831
.... 87.5MHz
TC801,TC802,TC803
.... 108.0MHz
Method : • The level at 87.5MHz is adjusted by L802, L804, L831. Then the level at 108.0MHz is adjusted by TC801, TC802, TC803 so that the distortion is less than 3%.

8. DC Balance / Mono Distortion Adjustment
Settings : • Test point : TP3, TP4 (DC balance)
TP5, TP6 (Distortion)
• Ajustment location : L741
• Input level : 54dB
Method : Set to FM 98.0MHz and adjust L741 so that the voltage between TP3 and TP4 becomes 0V ± 0.04V. Next, check that the distortion is less than 1.3%.

9. Auto Stop Level Adjustment
Settings : • Test point : TP7
• Adjustment location : SFR722
• Input level : 20dB
Method : Set to FM 98.0 MHz and adjust voltage low (about 0.1V) by SFR722. After that voltage high (about 7.0V) by 2dB down.

< DECK SECTION >

10. Tape Speed Adjustment
Settings : • Test tape : TTA–100
• Test point : TP8, TP9
• Adjustment location : SFR1
Method : Play back the test tape by DECK 2 and adjust SFR1 so that the frequency counter reads 3000Hz ± 5Hz.

11. Head Azimuth Adjustment
Settings : • Test tape : TTA–300
• Test point : TP8, TP9
• Adjustment location : Head azimuth adjustment screw
Method : Play back the 10kHz signal of the test tape and adjust screw so that the output becomes maximum. Next, perform on each FWD PLAY and REV PLAY mode.

12. PB Frequency Response Check (DECK 1, DECK 2)
Settings : • Test tape : TTA–300
• Test point : TP8, TP9
Method : Play back the 315Hz and 10kHz signals of the test tape and check that the output ratio of the 10kHz signal is with respect to that of the 315Hz signal is ± 2dB.

13. PB Sensitivity Adjustment
Settings : • Test tape : TTA–200
• Test point : TP8, TP9
• Adjustment location :
SFR311 (DECK 1, Lch)
SFR312 (DECK 1, Rch)
SFR321 (DECK 2, Lch)
SFR322 (DECK 2, Rch)
Method : Play back the test tape and adjust SFRs so that the output level at the test point become 300mV.

14. REC/PB Frequency Response Adjustment
Settings : • Test tape : TTA–602
• Test point : TP8, TP9
• Input signal : 1kHz / 10kHz (LINE IN)
• Adjutment location : SFR371 (Lch)
SFR372 (Rch)
Method : Apply a 1kHz signal and REC mode. Then adjust OSC attenuator so that the output level at the TP8, TP9 becomes 21mV. Record and play back the 1kHz and 10kHz signals and adjust SFRs so that the output of the 10kHz signals becomes 0dB ± 0.5dB with respect to that of the 1kHz signal.

15. PB/REC Sensitivity Adjustment
Settings : • Test tape : TTA–602
• Test point : TP8, TP9
• Input signal : 1kHz (LINE IN)
• Adjustment location : SFR401 (Lch)
SFR402 (Rch)
Method : Apply a 1kHz signal and REC mode. Then adjust OSC attenuator so that the output level at the TP8, TP9 becomes 21mV. Record and play back the 1kHz and adjust SFRs so that the output is 21mV ± 0.5dB.

16. Bias OSC Frequency Adjustment
Settings : • Test tape : TTA–601
• Test point : TP10
• Adjustment location : L371
Method : Set to the REC mode. Adjust L371 so that the frequency counter of the test point becomes 85 kHz ± 0.1 kHz.

PRACTICAL SERVICE FIGURE

<TUNER SECTION>

<FM SECTION>

IHF Sensitivity :	8dB ± 6dB
(THD 3%)	[at 87.5MHz]
	7dB ± 6dB
	[at 98 / 108.0MHz]
S/N 46dB Quieting sensitivity :	
	34dB ± 5dB
	[at 87.5 / 98.0 / 108.0MHz]
Signal to noise ratio :	(MONO) More than 65dB
	[at 98.0MHz]
	(STEREO) More than 59dB
	[at 98.0MHz]
Distortion :	(MONO) Less than 1.3%
	[at 98.0MHz]
	(STEREO) Less than 2.0%
	[at 98.0MHz]
Auto stop level :	20dB ± 10dB [at 98.0MHz]
Stereo separation :	More than 20dB [at 98.0MHz]
Intermediate frequency :	10.7MHz

<AM(MW) SECTION>

Sensitivity :	52 ~ 64dB
(S/N 20 dB)	[at 603kHz]
	50 ~ 62dB
	[at 999 / 1404kHz]
Signal to noise ratio :	More than 36dB
	[at 999kHz]
Distortion :	Less than 1.5%
	[at 999kHz]
Auto stop level :	40dB ~ 65dB
	[at 999kHz]
Intermediate frequency :	450kHz

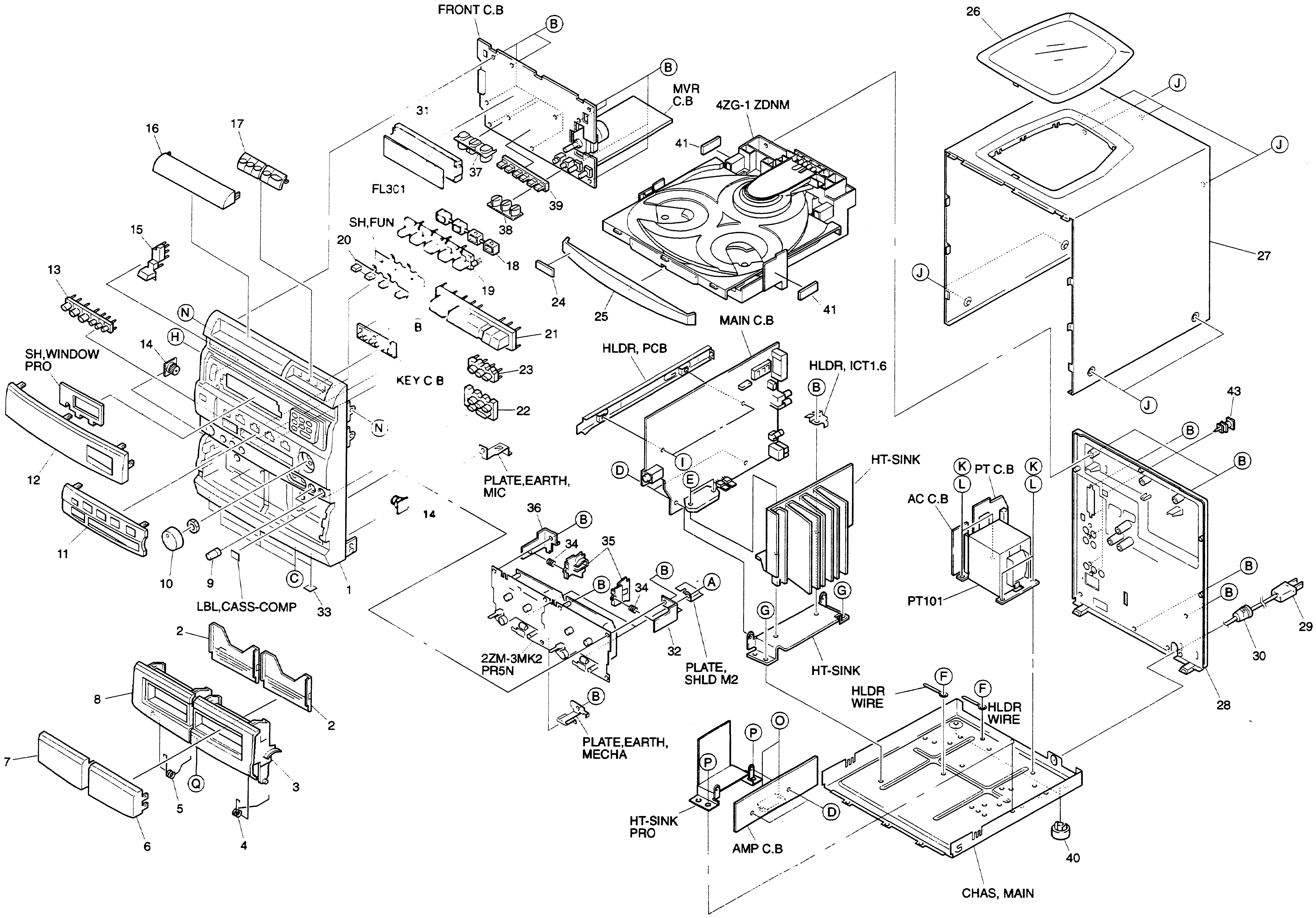
<LW SECTION>

Sensitivity :	68dB ± 5dB (144kHz)
(S/N 20dB)	65dB ± 5dB (198kHz)
	65dB ± 5dB (290kHz)
Distortion :	Less than 1.5% (198kHz)
Intermediate frequency :	450kHz

<DECK SECTION>

Tape speed :	3000Hz ± 45Hz
Wow & flutter :	Less than 0.15%
	(W. R.M.S)
Take-up torque :	30 ~ 55g-cm
	(FWD, REV)
F.F & REW torque :	75 ~ 180g-cm
Back tension :	2 ~ 7g-cm
	(FWD, REV)
PB output level :	2.8V ± 3dB
	(SP OUT 2V)
REC/PB output level :	1.6V ± 3dB
	(SP OUT 2V)
Distortion (REC/PB) :	Less than 2.0%
Noise level (PB) :	Less than 300mV (NORM)
	Less than 150mV (CrO_2)
	(DOLBY OFF LINEAR, SP OUT 2V)
Noise level (REC/PB) :	Less than 25mV/12mV (NORM)
	Less than 18mV/10mV (CrO_2)
	(DOLBY OFF LINEAR / WTD, SP OUT 2V)
Crosstalk :	More than 55dB
	(1kHz, 0VU)
Channel separation :	More than 40dB
	(1kHz, 0VU)
Erasing ratio :	More than 60dB
	(at 125Hz)
Test tape :	TTA–602 (NORMAL)
	TTA–610 (CrO_2)

MECHANICAL EXPLODED VIEW 1/1

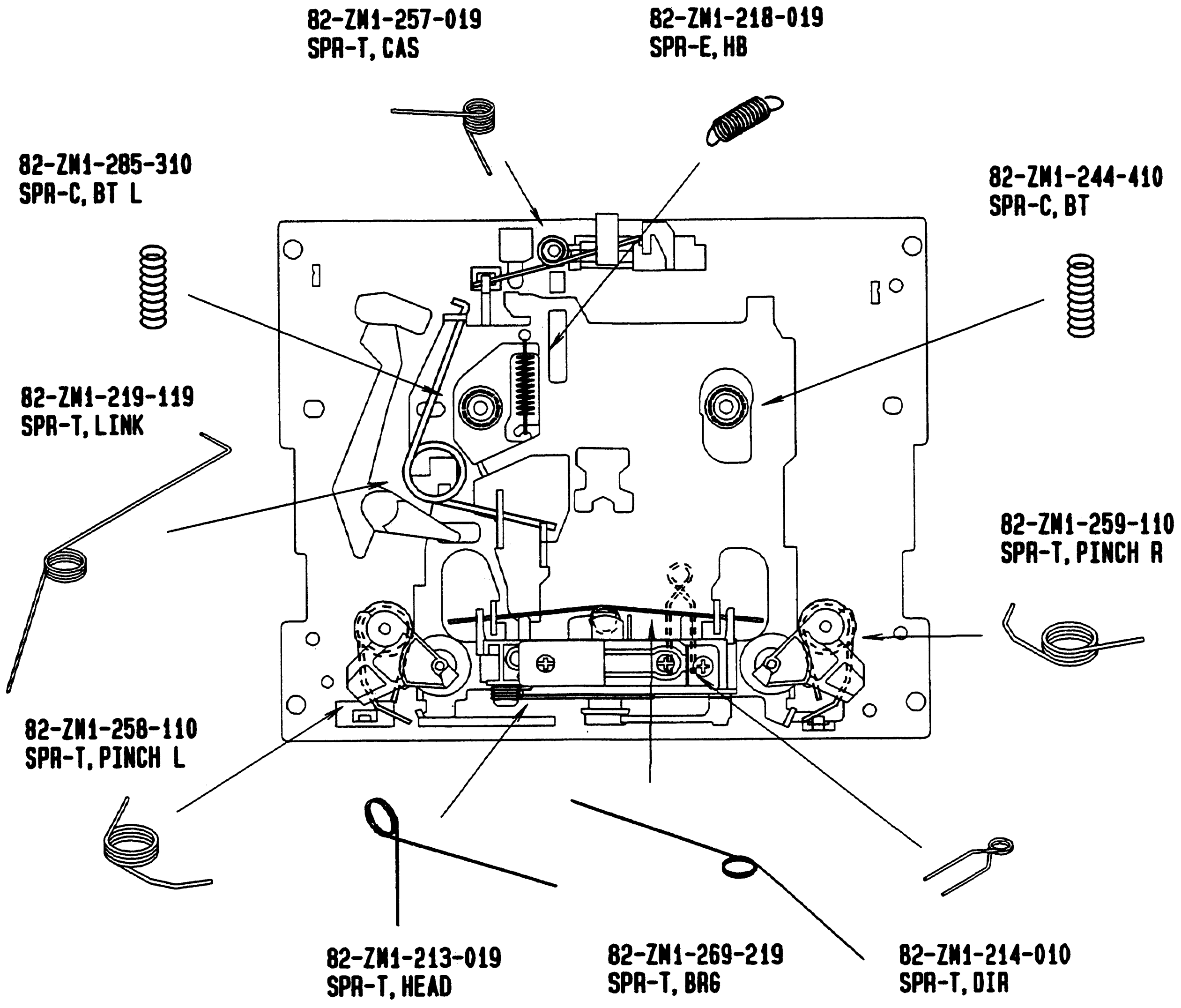

FRONT C.B
B
MVR
C.B
4ZG-1 ZDNM
31
16
17
41
37
39
38
FL301
SH,FUN
20
18
19
15
13
24
25
41
N
21
KEY C B
MAIN C.B
HLDR, PCB
HLDR, ICT1.6
SH,WINDOW
PRO
14
H
23
22
N
PLATE,EARTH,
MIC
D
I
E
HT-SINK
12
11
10
9
C
1
LBL,CASS-COMP
33
14
36
34
35
34
A
32
PLATE,
SHLD M2
2ZM-3MK2
PR5N
G
G
HT-SINK
2
8
2
7
5
Q
3
4
6
PLATE,EARTH,
MECHA
P
O
P
HT-SINK
PRO
AMP C.B
HLDR
WIRE
F
F
HLDR
WIRE
CHAS, MAIN
26
J
J
27
J
J
43
B
B
K
PT C.B
K
L
L
AC C.B
PT101
B
B
29
30
28
40

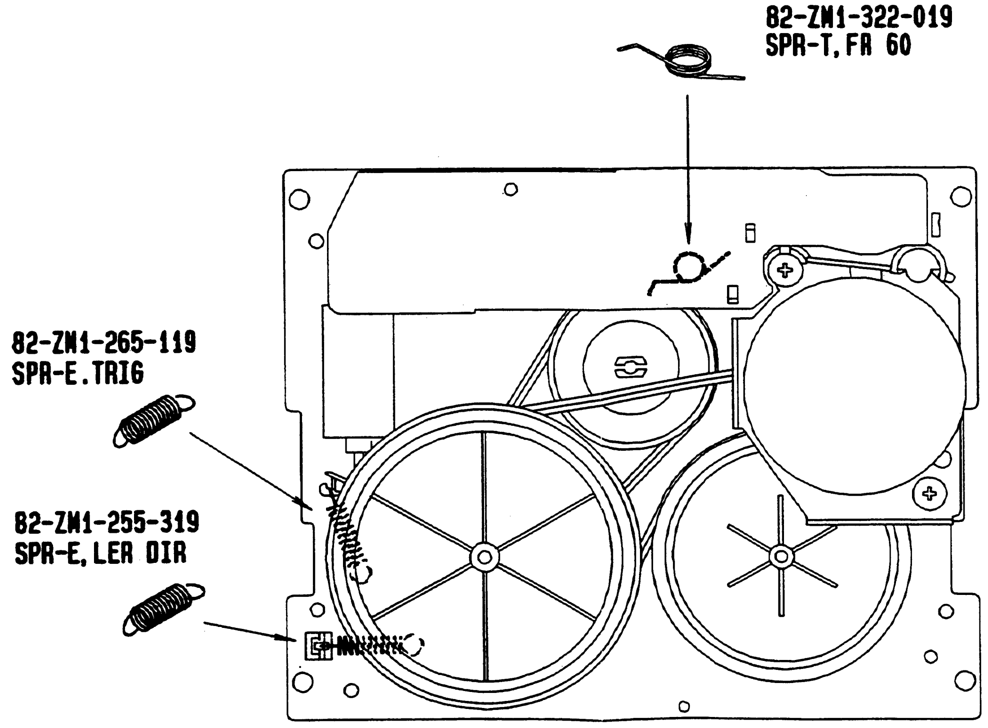
MECHANICAL PARTS LIST 1/1

If can't understand for Description please kindly refer to " REFERENCE NAME LIST ".

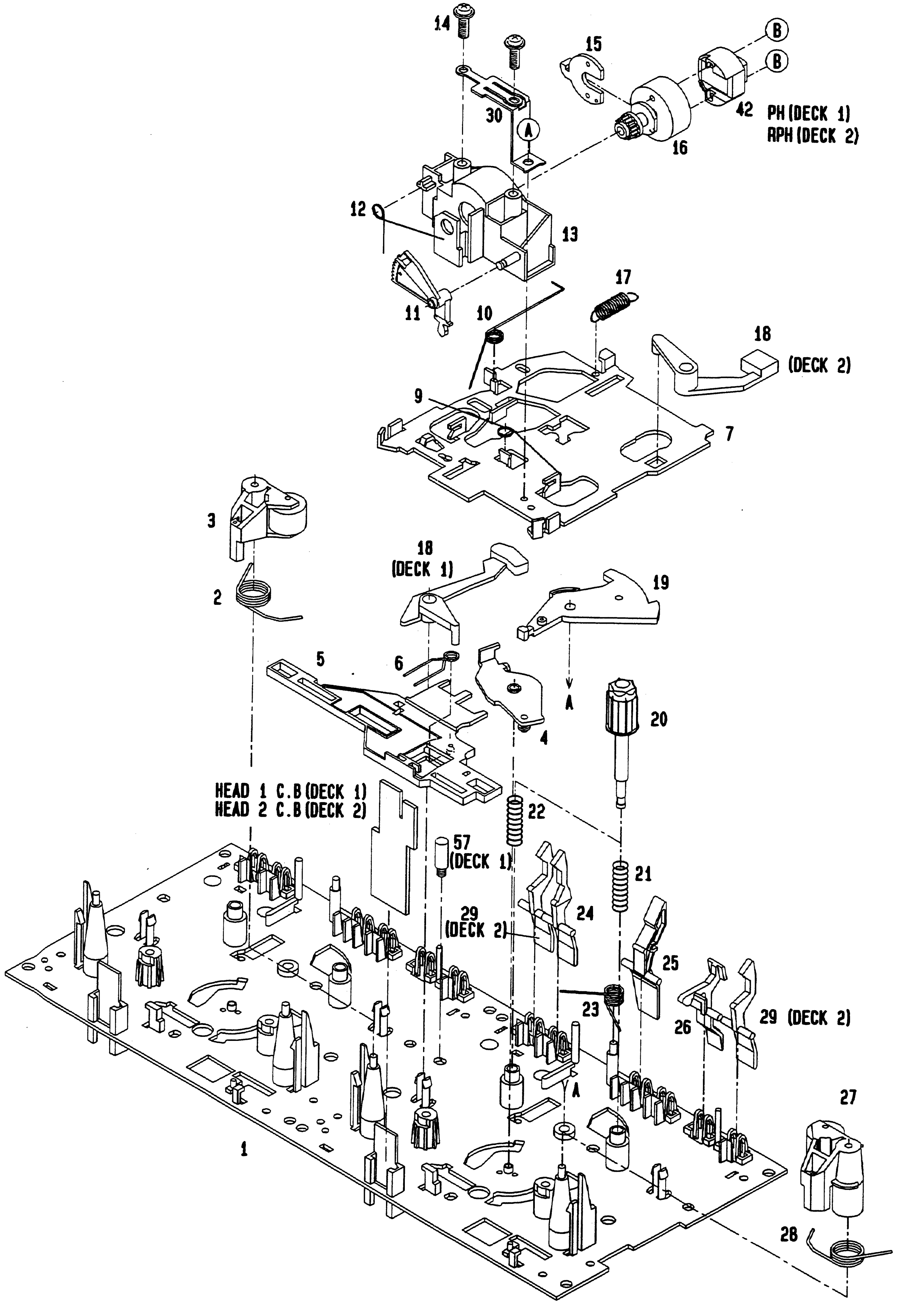
REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	86-NFT-002-019		CABI,FR E[B]<K>,[B]<G>
1	86-NFT-004-019		CABI,STEEL TS[ST]<EZ>
2	86-NF6-061-019		REFLECTOR,CASS
3	86-NF6-004-019		BOX,CASS 2[B]<G>
3	86-NF6-047-019		BOX,CASS 2E[B]<K>
3	86-NFT-022-019		BOX,CASS 2TS[ST]<EZ>
4	82-NF5-219-019		SPR-T,EJECT 2 (SIN)
5	82-NF5-218-019		SRT-T,EJECT 1 (SIN)
6	86-NF6-020-019		WINDOW,CASS 2
7	86-NF6-019-019		WINDOW,CASS 1
8	86-NF6-003-019		BOX,CASS 1[B]<G>
8	86-NF6-046-019		BOX,CASS 1E[B]<K>
8	86-NFT-021-019		BOX,CASS 1TS[ST]<EZ>
9	86-NF6-050-019		KNOB,RTRY MIC M
10	86-NF6-063-019		KNOB,RTRY VOL[B]<K>,[B]<G>
10	86-NFT-032-019		KNOB,RTRY VOL TS[ST]<EZ>
11	86-NF6-006-019		PANEL,CONTROL
12	86-NFT-006-119		WINDOW,DISP
13	86-NF6-013-019		KEY,DOLBY[B]<K>,[B]<G>
13	86-NFT-035-019		KEY,DOLBY TS[ST]<EZ>
14	87-063-165-019		OIL-DMPR 150
15	86-NF6-009-019		KEY,POWER[B]<K>,[B]<G>
15	86-NFT-033-019		KEY,POWER TS[ST]<EZ>
16	86-NF6-018-019		WINDOW,CD
17	86-NF6-015-019		KEY,CD[B]<K>,[B]<G>
17	86-NFT-031-019		KEY,CD TS[ST]<EZ>
18	86-NF6-208-019		GUIDE,FUN
19	86-NF6-011-019		KEY,FUN
20	86-NF6-016-019		REFLECTOR,FUN
21	86-NF6-012-019		KEY,OPE
22	86-NFT-008-019		KEY,PL
23	86-NF6-014-019		KEY,DSP
24	82-NE6-067-019		BADGE AIWA 30N
25	86-NFT-023-019		PANEL,TRAY TS[ST]<EZ>
25	86-NF6-051-019		PANEL,TRAY U[B]<K>,[B]<G>
26	86-NF6-007-019		WINDOW,TOP
27	86-NF6-048-019		CABI,STEEL H-S[B]<K>,[B]<G>
27	86-NFT-005-019		CABI,STEEL TS[ST]<EZ>
28	86-NFT-015-019		PANEL,REAR EZ[ST]<EZ>
28	86-NFT-020-019		PANEL,REAR GBNM[B]<G>
28	86-NFT-014-019		PANEL,REAR KBNM[B]<K>
⚠ 29	87-050-081-110		AC CORD ASSY G[B]<G>
⚠ 29	87-A80-007-110		AC CORD ASSY K[B]<K>
⚠ 29	87-050-079-019		AC CORD ASSY,E[ST]<EZ>
30	87-085-185-010		BUSHING,CORD E
31	82-NF7-210-019		GUIDE,FL
32	82-NF5-227-019		HLDR,LOCK 2N
33	8[illegible]-202-019		FELT,12.5-15.5-2
34	82-NF5-228-019		SPR-C,LOCK
35	82-NF5-229-019		PLATE,LOCK
36	82-NF5-226-019		HLDR LOCK 1N
37	86-NF6-210-019		GUIDE,LED L
38	86-NF6-209-019		GUIDE,LED R
39	86-NF6-205-019		GUIDE,OPE
40	87-[illegible]-221-019		FOOT,H 13.5
41	87-[illegible]-173-019		CLOTH,30-10-0.35
42	8[illegible]-245-110		CAP OPTICAL
A	87-[illegible]-032-419		VIT+2-3
B	87-067-703-019		BVT2+3-10 (W/0 SLOT)
C	87-067-673-019		BVTT +3-8 BLK
D	87-067-633-019		BVT2+3-8 W/CONVEX
E	87-067-698-019		BVT 2+3-18 (W/O SLOT)
F	87-067-584-019		BVT2+3-6
G	87-067-689-019		BVTT+3-8
H	87-[illegible]-194-419		QIT + 3 - 6 GOLD
I	87-078-184-019		BVTT+3-6 W,CONVEX
J	87-067-641-019		UTT2+3-8 W/O SLOT BLK
K	87-[illegible]-183-019		BUTT SEMS+4-8SW
L	87-410-225-019		W4-10-0.8
N	87-[illegible]-197-419		QT2+3-12 GLD
O	87-067-581-019		BVT2+3-15 W/O SLOT
P	87-067-688-019		BVTT +3-6
Q	8[illegible]-215-019		W4.2-7-0.188

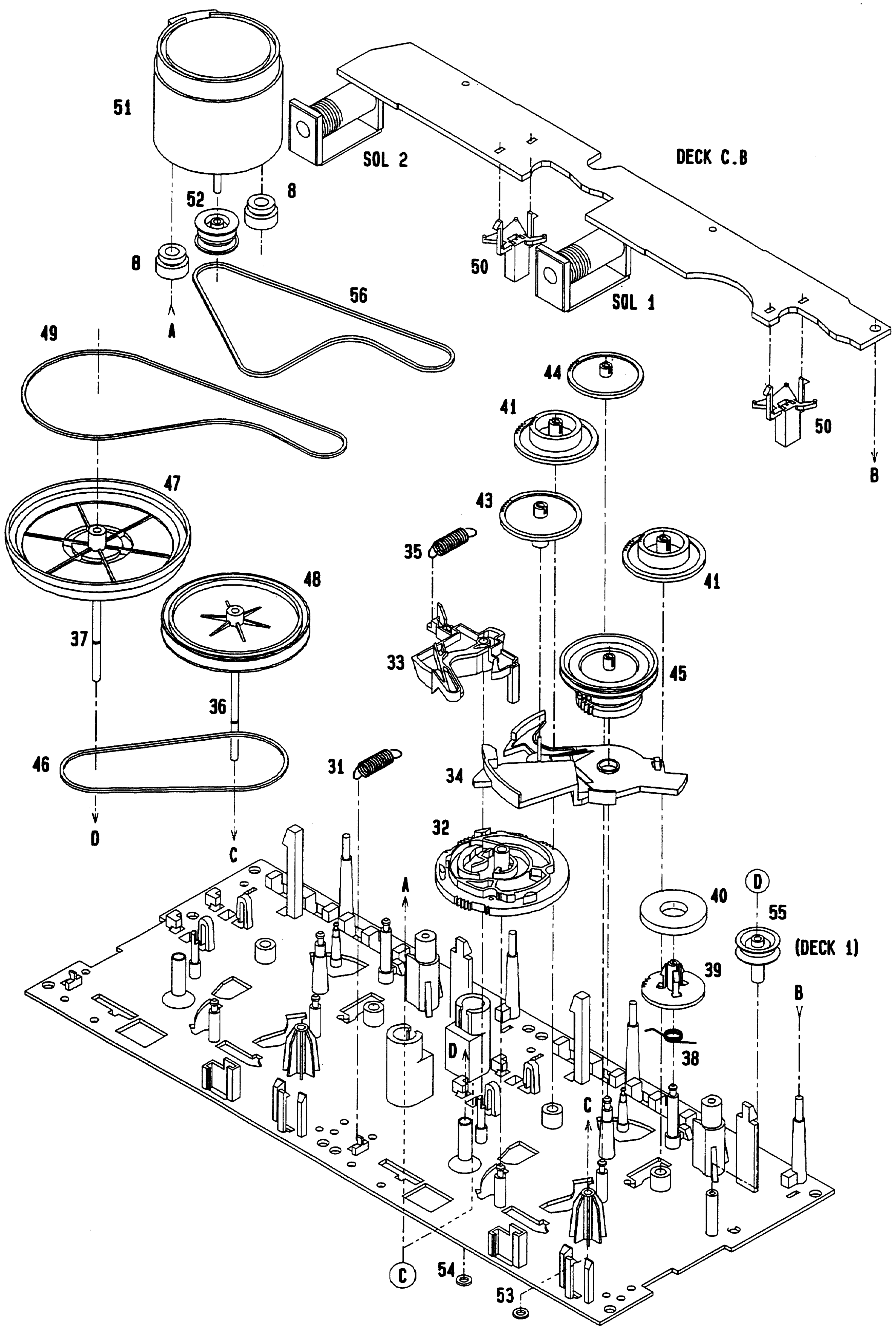
SPRING APPLICATION POSITION


82-ZM1-257-019
SPR-T, CAS
82-ZM1-218-019
SPR-E, HB
82-ZM1-285-310
SPR-C, BT L
82-ZM1-244-410
SPR-C, BT
82-ZM1-219-119
SPR-T, LINK
82-ZM1-259-110
SPR-T, PINCH R
82-ZM1-258-110
SPR-T, PINCH L
82-ZM1-213-019
SPR-T, HEAD
82-ZM1-269-219
SPR-T, BRG
82-ZM1-214-010
SPR-T, DIR


82-ZM1-322-019
SPR-T, FR 60
82-ZM1-265-119
SPR-E.TRIG
82-ZM1-255-319
SPR-E, LER DIR

TAPE MECHANISM EXPLODED VIEW 1/1


14
15
B
B
30
A
42 PH (DECK 1)
RPH (DECK 2)
16
12
13
11
10
17
18
(DECK 2)
9
7
3
18
(DECK 1)
19
2
5
6
A
4
20
HEAD 1 C.B (DECK 1)
HEAD 2 C.B (DECK 2)
22
57
(DECK 1)
21
29
(DECK 2)
24
25
23
26
29 (DECK 2)
A
1
27
28


51
SOL 2
DECK C.B
52
8
8
50
SOL 1
A
56
49
44
41
50
B
47
43
35
41
48
37
33
45
36
46
31
34
D
C
32
A
40
D
55
(DECK 1)
39
B
38
D
C
C
54
53

TAPE MECHANISM PARTS LIST 1/1

If can't understand for Description please kindly refer to " REFERENCE NAME LIST ".

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	82-ZM3-301-519		CHAS ASSY,M2
2	82-ZM1-258-110		SPR-T,PINCH L
3	82-ZM1-345-019		LVR ASSY,PINCH L W
4	82-ZM1-333-010		PLATE,LINK 2
5	82-ZM1-266-11K		LVR,DIR
6	82-ZM1-214-010		SPR-T,DIR
7	82-ZM1-206-81K		CHAS,HEAD
8	82-ZM3-307-019		CUSH-G,DIA3.7-8-3.2
9	82-ZM1-269-219		SPR-T,BRG
10	82-ZM1-219-119		SPR-T,LINK
11	82-ZM1-210-119		GEAR,H T
12	82-ZM1-213-019		SPR-T,HEAD
13	82-ZM1-207-619		GUIDE,TAPE
14	82-ZM1-283-310		S-SCREW,AZIMUTH
15	82-ZM1-314-119		PLATE,HEAD
16	82-ZM1-208-119		HLDR,HEAD
17	82-ZM1-218-019		SPR-E,HB
18	82-ZM1-263-110		LVR,EJECT L (DECK 1)
18	82-ZM1-264-010		LVR,EJECT R (DECK 2)
19	82-ZM1-222-21K		LVR,PLAY
20	82-ZM1-217-319		REEL TABLE
21	82-ZM1-244-510		SPR-C,BT
22	82-ZM1-285-310		SPR-C,BT L
23	82-ZM1-257-019		SPR-T,CAS
24	82-ZM1-241-319		LVR,MC
25	82-ZM1-242-019		LVR,CAS
26	82-ZM1-243-019		LVR,STOP
27	82-ZM1-346-019		LVR ASSY,PINCH R W
28	82-ZM1-259-110		SPR-T,PINCH R
29	82-ZM1-240-11K		LVR,REC (DECK 2)
30	82-ZM1-298-010		SPR-P,EARTH
31	82-ZM1-255-319		SPR-E,LVR DIR
32	82-ZM3-305-01K		GEAR,CAM M2
33	82-ZM1-227-21K		LVR,TRIG
34	82-ZM3-306-11K		LVR,FR M2
35	82-ZM1-265-119		SPR-E,TRIG
36	82-ZM1-236-019		CAPSTAN N 2-41.5
37	82-ZM1-239-019		CAPSTAN N 2.2-41.7
38	82-ZM1-322-019		SPR-T,FR60
39	82-ZM1-220-219		GEAR,IDLER
40	82-ZM3-616-019		RING MAGNET 4
41	82-ZM1-216-31K		GEAR,REEL
42	87-046-355-019		HEAD,PH HADKH2529B(PH)
42	87-046-356-019		HEAD,RPH HADKH5581B(RPH)
43	82-ZM1-225-21K		GEAR,FR
44	82-ZM1-226-019		GEAR,REW
45	82-ZM1-228-810		SLIP DISK ASSY
46	82-ZM1-338-010		BELT FR4
47	82-ZM1-238-81K		FLY-WHL ASSY,R (DECK 2)
47	82-ZM3-210-71K		FLY-WHL ASSY,R2 (DECK 1)
48	82-ZM1-235-51K		FLY-WHL ASSY,L (DECK 2)
48	82-ZM3-208-61K		FLY-WHL ASSY,L2 (DECK 1)
49	82-ZM3-329-210		BELT,SBU R2
50	82-ZM1-245-210		HLDR,IC
51	87-045-347-019		MOT,SHU2L 70(M1)
52	82-ZM3-221-010		PULLEY,MOT 2M
53	82-ZM1-288-019		SH,1.63-3.2-0.5 SLT
54	80-ZM6-243-019		SH,1.75-3.6-0.5 SLT
55	82-ZM3-304-110		PULLEY,COUPLER (DECK 1)
56	82-ZM3-328-110		BELT,SBU P2
57	82-ZM3-216-019		SHAFT,COUPLER N(DECK 1)
A	82-ZM1-315-010		S-SCREW,GVIDE TAPE
B	80-ZM6-207-019		V+1.6-7
C	82-ZM3-318-019		S-SCRW MOTOR M2
D	87-067-972-019		PW,1.05-3-0.25 SLT

ACCESSORIES / PACKAGE LIST

If can't understand for Description please kindly refer to " REFERENCE NAME LIST ".

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	86-NFT-903-019		IB,E(EGFSI)-M<EZ>
1	86-NFT-904-019		IB,K(E)-M<K>
1	86-NFT-905-019		IB,G(E)-M<G>
2	86-MAP-701-119		RC UNIT,6AS02
3	87-006-225-019		AM LOOP ANT NC2
4	87-043-106-019		FM,WIRE ANT (Z)

REFERENCE NAME LIST

ELECTRICAL SECTION

DESCRIPTION	REFERENCE NAME
ANT	ANTENNAS
C-	CHIP
C-CAP	CAP, CHIP
C-CAP TN	CAP, CHIP TANTALUM
C-COIL	COIL, CHIP
C-DI	DIODE, CHIP
C-DIODE	DIODE, CHIP
C-FET	FET, CHIP
C-FOTR	FILTER, CHIP
C-JACK	JACK, CHIP
C-LED	LED, CHIP
C-RES	RES, CHIP
C-SFR	SFR, CHIP
C-SLIDE SW	SLIDE SWITCH, CHIP
C-SW	SWITCH, CHIP
C-TR	TRANSISTOR, CHIP
C-VR	VOLUME, CHIP
C-ZENER	ZENER, CHIP
CAP, CER	CAP, CERA-SOL
CAP, E	CAP, ELECT
CAP, M/F	CAP, FILM
CAP, TC	CAP, CERA-SOL
CAP, TC-U	CAP, CERA-SOL SS
CAP, TN	CAP, TANTALUM
CERA FIL	FILTER, CERAMIC
CF	FILTER, CERAMIC
DL	DELAY LINE
E/CAP	CAP, ELECT
FILT	FILTER
FLTR	FILTER
FUSE RES	RES, FUSE
MOT	MOTOR
P-DIODE	PHOTO DIODE
P-SNSR	PHOTO SENSER
P-TR	PHOTO TRANSISTOR
POLY VARI	VARIABLE CAPACITOR
PPCAP	CAP, PP
PT	POWER TRANSFORMER
PTR, RES	PTR, MELF
RC	REMOTE CONTROLLER
RES NF	RES, NON-FLAMMABLE
RESO	RESONATOR
SHLD	SHIELD
SOL	SOLENOID
SPKR	SPEAKER
SW, LVR	SWITCH, LEVER
SW, RTRY	SWITCH, ROTARY
SW, SL	SWITCH, SLIDE
TC CAP	CAP, CERA-SOL
THMS	THERMISTOR
TR	TRANSISTOR
TRIMER	CAP, TRIMMER
TUN-CAP	VARIABLE CAPACITOR
VIB, CER	RESONATOR, CERAMIC
VIB, XTAL	RESONATOR, CRYSTAL
VR	VOLUME
ZENER	DIODE, ZENER

MECHANICAL SECTION

DESCRIPTION	REFERENCE NAME
ADHESHIVE	SHEET ADHESHIVE
AZ	AZIMUTH
BAR-ANT	BAR-ANTENNA
BAT	BATTERY
BATT	BATTERY
BRG	BEARING
BTN	BUTTON
CAB	CABINET
CASS	CASSETTE
CHAS	CHASSIS
CLR	COLLAR
CONT	CONTROL
CRSR	CURSOR
CU	CUSHION
CUSH	CUSHION
DIR	DIRECTION
DUBB	DUBBING
FL	FRONT LOADING
FLY-WHL	FLYWHEEL
FR	FRONT
FUN	FUNCTION
G-CU	G-CUSHION
HDL	HANDOL
HIMERON	CLOTH
HINGE, BAT	HINGE, BATTERY
HLDR	HOLDER
HT-SINK	HEAT SINK
IB	INSTRUCTION BOOKLET
IDLE	IDLER
IND, L-R	INDICATOR, L-R
KEY, CONT	KEY, CONTROL
KEY, PRGM	KEY, PROGRAM
KNOB, SL	KNOB, SLIDE
LBL	LABEL
LID, BATT	LID, BATTERY
LID, CASS	LID, CASSETTE
LVR	LEVER
P-SP	P-SPRING
PANEL, CONT	PANEL, CONTROL
PANEL, FR	PANEL, FRONT
PRGM	PROGRAM
PULLY, LOAD MO	PULLY, LOAD MOTOR
RBN	RIBBON
S-	SPECIAL
SEG	SEGMENT
SH	SHEET
SHLD-SH	SHIELD-SHEET
SL	SLIDE
SP	SPRING
SP-SCREW	SPECIAL-SCREW
SPACER, BAT	SPACER, BATTERY
SPR	SPRING
SPR-P	P-SPRING
SPR-PC-PUSH	P-SPRING, C-PUSH
T-SP	T-SPRING
TERM	TERMINAL
TRIG	TRIGGER
TUN	TUNING
VOL	VOLUME
W	WASHER
WHL	WHEEL
WORM-WHL	WORM-WHEEL

サービス技術ニュース	
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Tokyo Japan

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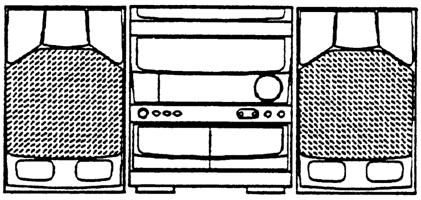
aiwa SERVICE

CX-NV700
CX-NV710
NSX-AV700
NSX-AV70
NSX-V770
NSX-K77



COMPACT DISC STEREO
CASSETTE RECEIVER

- BASIC TAPE MECHANISM : 2ZM–3MK2
- BASIC CD MECHANISM : 4ZG–1
- TYPE: HE, HR, LH, U, G, K, E1, E, EZ

SERVICE MANUAL

CORRECTION

MODEL NAME	TYPE	TAPE MECHANISM	CD MECHANISM
CX–NV700	HE, LH, EZ, E, G	PR5N	ZDNM
CX–NV710	K, E1		
NSX–AV700	U		
NSX–AV70	HE, HR, EZ, K, G		
NSX–V770	HE, HR	PR3N	
NSX–K77	HE, HR		GDFRV5NM

- This Correction Service Manual is issued because of some errors in Service Manuals of MODEL NAME CX-NV700 (S/M Code No. 09-963-129-1FE), CX-NV700/CX-NV710 (S/M Code No. 09-966-140-1FE), NSX-AV70/NSX-AV700 (S/M Code No. 09-964-134-7FE), NSX-AV70 (S/M Code No. 09-966-144-8FE), NSX-V770 (S/M Code No. 09-966-144-7FE) and NSX-K77 (S/M Code No. 09-966-144-6FE).

S/M Code No. 09–968–159–2FE

TAPE MECHANISM PARTS LIST 1/1 <CX–NV700, CX–NV710, NSX–AV700, NSX–AV70>

If can't understand for Description please kindly refer to " REFERENCE NAME LIST ".

WRONG			CORRECT		
REF. NO.	PART NO.	DESCRIPTION	REF. NO.	PART NO.	DESCRIPTION
40	82-ZM3-616-019	RING MAGNET 4	40	82-ZM1-316-010	RING MAGNET 3
42	87-046-355-019	HEAD,PH HADKH2529B(PH)	42	87-046-398-019	HEAD,PH YK50P-BS409(PH)
42	87-046-356-019	HEAD,RPH HADKH5581B(RPH)	42	87-046-399-019	HEAD,RPH YK56R-BS409(RPH)

TAPE MECHANISM PARTS LIST 1/1 <NSX–V770, NSX–K77>

If can't understand for Description please kindly refer to " REFERENCE NAME LIST ".

WRONG			CORRECT		
REF. NO.	PART NO.	DESCRIPTION	REF. NO.	PART NO.	DESCRIPTION
3	82-ZM1-345-019	LVR ASSY,PINCH L W	3	82-ZM1-248-519	LVR ASSY,PINCH L
4	82-ZM1-333-010	PLATE,LINK 2	4	82-ZM1-295-31K	PLATE ASSY,LINK
27	82-ZM1-346-019	LVR ASSY,PINCH R W	27	82-ZM1-253-519	LVR ASSY,PINCH R
40	82-ZM3-616-019	RING MAGNET 4	40	82-ZM1-316-010	RING MAGNET 3
42	87-046-355-019	HEAD,PH HADKH2529B(PH)	42	87-046-398-019	HEAD,PH YK50P-BS409(PH)
42	87-046-356-019	HEAD,RPH HADKH5581B(RPH)	42	87-046-399-019	HEAD,RPH YK56R-BS409(RPH)
49	82-ZM3-329-210	BELT,SBU R2	49	82-ZM3-313-019	BELT R10
52	82-ZM3-221-010	PULLEY,MOT 2M	52	82-ZM3-202-019	PULLEY,MOT 2M
56	82-ZM3-328-110	BELT,SBU P2	56	82-ZM3-312-019	BELT P10

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